DESIGN OF THE 2ND GENERATIONS/HMO DEMONSTRATION: AN ANALYSIS OF MULTIPLE INCENTIVES

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EXECUTIVE SUMMARY

Although the 1st generation S/HMO was designed with sufficient incentives to attract sponsors, the incentives for an optimally successful program to implement the S/HMO concept and achieve the desired outcomes were not in place. The report's recommendations for the 2nd generation S/HMO demonstration are based on an analysis of the multiple incentives facing sponsors, providers, potential consumers, and enrollees in the 1st generation demonstration, and the changing context of health care for the elderly since the S/HMOs were initiated in 1982.

Purpose and Method

For the 2nd generation S/HMO to be mounted, health care organizations and potential consumers must perceive S/HMO membership positively. Beyond that, for the 2nd generation S/HMO demonstration to achieve its objectives in offering a more effective and/or efficient package of services, the incentives to the various actors must be in place so that true tradeoffs are made, when appropriate, between acute care and long-term care, and between medically oriented long-term care and socially oriented long-term care.

This report is based on a review of long-term care, geriatrics, case management, and insurance research and literature; a review of the findings from the 1st generation S/HMO evaluation; examination of the value of the 1st generation S/HMO chronic care benefit to consumers in comparison to long-term care insurance currently available in the marketplace; examination of the S/HMO revenue streams in relation to reported expenditures of the 1st generation S/HMOs, discussions with authorities in the field and potential S/HMO sponsors; a study of current geriatric capacities in HMOs; a study of the urban and rural HMO market; and consideration of contextual changes since the early 1980s when the 1st generation S\HMO demonstration was launched.

Background and Concept

A S\HMO is a health financing and delivery system designed to transfer some money spent on acute care for the elderly to an investment in long-term care, and some money spent on health-oriented long-term care to socially oriented long-term care.

The demonstration S/HMOs had 4 defining features: a single organizational structure at financial risk for providing the full range of mandatory acute and post-acute Medicare benefits, enriched health services, and chronic care benefits (including nursing home and home health care not covered by Medicare, personal care and homemaking, and adult day care); a coordinated case management system to authorize and allocate the chronic care benefit to those

who meet the established disability levels within fixed annual caps for the services; controlled enrollment of a cross-section of functionally impaired and impaired elderly; and financing through prepaid capitation based on funds pooled from Medicare, Medicaid (if applicable), and member premiums, as well as copayments and deductibles for the chronic care benefit.

The demonstration S/HMOs varied from each other and over time in their premiums, their chronic care benefits (what was covered and the related caps and copays), eligibility criteria for receiving the chronic care benefit, and supplemental medical benefits. Common features for all S/HMOs included: Medicare financing arrangements by which the S/HMOs received 100% of the AAPCC and the nursing home cell rate of the AAPCC for all S/HMO members who met their state's criteria for nursing home certifiability; permission to do prior screening of applicants and limit severely impaired enrollees to 5% of the enrollment; and a management program with standard annual health screening forms (HSFs) and comprehensive assessment forms (CAFs) to trigger use of the chronic care benefit.

Incentives in the S/HMO Program

Theoretically, a S/HMO offers economic incentives for health providers that are consistent with best practices in acute care and LTC delivery. Thus the S/HMO should have a disincentive to over-use expensive hospital care, an incentive to use preventive health care to forestall later more expensive care, and an incentive to use downward substitutions among types of care when a less expensive form of care can achieve the same result.

The incentives that were meant to operate so that S/HMOs could achieve their theoretically intended effects were not fully in force during the 1st generation demonstration for the following reasons: the partnership and contractual arrangements of some S/HMOs meant that key providers (physicians, hospitals, nursing homes, and home care agencies) had no incentive to reduce services and sometimes had an incentive to increase volume; at 3 sites physicians tended to be unaware that their patients were S/HMO members; salaried HMO physicians sometimes had incentives to maximize their spare time or convenience that operated in the opposite direction from intended S/HMO incentives; the chronic care benefits were circumscribed; the possibility and likelihood of disenrollment from the S/HMO weakened the incentives related to prevention; and, sometimes because of inertia and sometimes by deliberate program design, the integration of acute and long-term care planning and service delivery did not occur to the extent expected.

Some design features of the demonstration were meant to attract sponsors and protect them from adverse selection, rather than to maximize the outcomes desired. These include HCFA's financial risk-sharing for 2 years, the desirable reimbursement

rates, and the permission to use prior health screening to limit the severely impaired enrollees to 5%. In part to avoid adverse selection and also, in part, because of a perception of consumer demand, the S/HMOs also tended to market themselves to consumers based on their supplemental health benefits and preventive services rather than their chronic care services.

Information is required for incentives to function. Physicians and other providers and consumers had imperfect information in the 1st generation S/HMO project. The perceptions of reality on the part of consumers, sponsors, and providers may have been as important in influencing behavior as the actual incentives built into the program.

Below we summarize the incentives that each party had or might now have for participating in a S/HMO program.

- Sponsors stand to gain from the increased capitation payments from Medicare in comparison to TEFRA HMOs. Also, they might be attracted by prospects of a larger market share, potential cost-shifting of TEFRA enrollees into the S/HMO, the prestige of participation in a national experiment, and related R&D benefits. On the other hand, based on widespread industry perceptions about TEFRA HMOs, they may be uneasy about the ability of government to set reimbursements at a level to permit reasonable profits. They are also wary about increased oversight of financial and other records.

- Consumers might be tempted to join an S/HMO if they believed that they would get better or more care for their money, that they would be protected from a need to enter a nursing home, that their out of pocket expenses would be minimized, and that their assets would be protected against the catastrophic costs of long-term care. On the other hand, consumers might be deterred from entering an S/HMO because of loss of continuity of physician, choice of physician or hospital, flexibility in LTC provision, and flexibility to move out of the area, as well as the general concerns about possible undertreatment in a capitated system.

- Physicians and contracting hospitals, nursing homes, and/or long-term care organizations might be induced to participate as S/HMO providers because of the prospects of increased referrals, increased profits, making more services available to their clientele, and participating in an interesting national program. They might have disincentive to participate because of potential loss of control, unfavorable financial arrangements, or excessive oversight from the S/HMO.

Lessons from 1st Generation S/HMO

Insights from the Process Evaluation

The S/HMOs were slow to achieve their desired complement of members and 3 of them incurred unexpectedly high marketing costs. Non-HMO sponsors had greater difficulty enrolling members (in part because they lacked roll-over potential) and in establishing working relationships with providers.

The S/HMOs only minimally changed the acute-care delivery system for their members. The state of the art of geriatric medicine was not implemented, and there were few ways that acute care and long-term care became better integrated.

Case management was the most well developed technology in the 1st generation S/HMOs. It had two functions: allocating and managing the chronic care benefit, and determining when S/HMO members were nursing home certifiable, a status that triggered a higher AAPCC rate regardless of whether chronic care benefits were used. Thus case management had both a benefit-triggering and a revenue-generating function.

Financial incentives and program goals were often not conveyed to providers in ways that affected behavior.

Insights from the Outcome Evaluation

Although not yet complete, the S\HMO evaluation raises issues that are relevant to the next generation demonstration:

- The S\HMOs were trying to simultaneously demonstrate the advantages of an insurance mechanism for combined acute and long-term care, the advantages of capitated financing that allowed tradeoffs between acute and long-term care, and that members achieved better outcomes benefits because of this integration of acute and long-term care. None of these points were satisfactorily demonstrated. In retrospect, it appears that the S/HMOs may have attempted to demonstrate too many things at once.

- The evaluation suggests that S/HMOs experienced favorable selection and favorable disenrollment compared to fee-for-service and even TEFRA HMOs.

- Preliminary results suggest that S/HMOs also had poorer case-mix-adjusted mortality than the comparison groups.

- Despite favorable AAPCC reimbursements, queuing, favorable selection and disenrollment, and fairly limited chronic care benefits, the S/HMOs report that they had difficulty breaking even and sometimes ran at a loss.

• Information was not readily available to evaluate the S/HMOs, compare them to each other, or to compare the regular TEFRA HMO group to the S/HMOs operated by the same sponsors.

Value of the Chronic Care Benefit

The general demand for long-term care insurance is weak at best, and potential consumers are unclear about their need for coverage. These factors taken together make it difficult to successfully market the S/HMO product to a general population.

Comparisons of the dollar value of the S/HMO chronic care benefit were made with actuarial fair rates for long-term care insurance calculated by the Brookings Institution. We found the cost-benefit ratio of the chronic care benefit to be quite attractive to the consumer compared to market long-term care insurance. However, the imposition of monthly caps for types of expenditures and total expenditures could significantly reduce the relative value of these benefits.

Cost of Care in the S/HMOs

Our analysis of revenue streams and utilization data suggests that S/HMOs were not particularly successful in reducing the rate of hospitalizations or shortening LOS when compared to other Medicare HMOs. Although the S/HMOs tended to show overall profits, they generally lost money on the nursing home certifiable population. Thus, under the present organization of health care delivery in the S/HMOs, the added revenue from using 100% of the AAPCC and the rate adjustment charged for the AAPCC for nursing home certifiable enrollees comes close to offsetting the total cost of care for all enrollees. Further analysis suggests that as the proportion of nursing home certifiable enrollees increases, either from open enrollment or from the current enrollees age in place projected net profit for the S/HMO falls off quickly.

2ND Generation S/HMO Design: Encouraging Participation

Changes since the initiation of the 1st S/HMOs in 1982 are relevant to the goals and conduct of the 2nd generation demonstration. Specifically: implementation of DRGs, which reduces former incentives for hospital overuse but increases likelihood of use of Medicare-funded post-acute care; expansion of community care and case management under Medicaid waivers, with accompanying experience with flexible case-managed community care benefits; initiation of PACE.e demonstration, which examine the utility of combining capitated acute care and LTC for Medicaid recipients who need long-term care at the point of enrollment; growing availability of LTC insurance products; growing availability of personal and nursing care in residential care settings other than nursing homes; expansion of TEFRA HMOs and Medicaid capitated care, blunting the distinction between S/HMOs and enriched TEFRA HMOs; and subsequent disenchantment with TEFRA HMOs and withdrawal of some firms from that market.

In the light of the changing context the following questions arise about the 2nd generation demonstration:

- the goals of the new S/HMOs and the intervention to be tested (including whether there is still a desire to test capitation or insurance principles per se.
- the target population
- the benefit structure
- a pricing system for reimbursement that is fair vis-a-vis other capitated Medicare programs while still retaining incentives for sponsors to participate
- the degree of specificity that should be mandated for the S/HMO delivery system.

TEFRA HMOs as S/HMO Sponsors

TEFRA risk HMOs are reasonable sponsors for S/HMOs, given that the 2 S/HMOs thus sponsored were more successfully implemented than the 2 sponsored by long-term care providers. However reliance on this sponsorship severely restricts the pool of potential participants. For example:

- If a threshold of 5000 Medicare risk contract enrollees is assumed necessary for S/HMO sponsorship only 47 of the 96 existing contractors as of December 1990 could realistically be eligible to become new S/HMOs; 12 of these are in HCFA Region IX (8 in Southern California) and 6 are in Southern Florida.

- If one assumes that HMOs would be interested in becoming S/HMOs to gain a competitive edge over their competitors, likely participants would come from communities with more than one of the 47 TEFRA risk contractors. Ten communities meet this criteria (including Portland and Minneapolis-St. Paul where S/HMOs exist) and only 27 potential participants are available.

- A study by Christianson and Dowd (1991) showed that many large HMOs that might be potential S/HMO sponsors are reassessing their commitment to continued enrollment growth in their TEFRA risk contracts). There was a widespread perception that they are either unprofitable or marginally profitable and that the quality assurance mandated by HCFA and administered by PROs is ineffective, costly, and unnecessary.

MIGS as S/HMO Sponsors

An alternative S/HMO sponsor that has received little attention is the Medicare Insured Group (MIG). Like the S/HMO, MIGs are an alternative to standard fee-for-service Medicare. Unlike the S/HMOs they provide, directly and indirectly, strong incentives for participation of both employers and consumers. The use of MIGs as

a S/HMO sponsor overcomes many of the faults identified by HMOs and might well contribute reducing the overall cost to the MIG through a more effective delivery of care to their retired beneficiaries.

2ND Generation S/HMO Design: The Delivery System

Incorporating Geriatric Care

Geriatric care was only minimally available in the S/HMO program, and, when available, was concentrated on the small pool at immediate risk using LTC. Yet geriatric care concepts can be extended to a larger pool of at-risk persons to avoid complications or detect problems early. This requires some front-end investment.

Approaches to incorporate geriatric practice include: drug monitoring to avoid polypharmacy; protocols for better evaluation of common geriatric conditions such as falls, incontinence, and confusion; standard assessment protocols to screen for persons at risk of complications because of lack of social support; leadership by geriatricians and geriatric nurse practitioners; greater use of alternatives to hospitals; greater use of alternatives to post-acute nursing home care; attention to medical decision-making; attention to discharge planning; and attention to end of life decision-making.

Geriatric Evaluation and Management (GEM) is an approach with demonstrated effectiveness if the evaluation (or assessment) is linked to remedial actions and if targeted to persons likely to benefit. Effective approaches from GEM programs could be incorporated into S/HMOs.

Geriatric attention in nursing homes and home care programs could also be incorporated in the S/HMOs. Nurse practitioners can serve particularly important roles.

Chronic care benefit and case management

In the 1st S/HMO demonstration, the home care portion of the chronic care benefit evolved at most sites to a benefit with a de facto or explicit monthly cap, equal to 1/12th the annual cap. Given that there is no reason to predict that the enrollee's need for the benefit will be distributed evenly throughout the year, the inability to accrue the benefit over a calendar year diminishes its worth to the consumer.

Two S/HMOs delivered much of their chronic care benefits through their own organizations, which did not necessarily provide the best value for home care in the market area. Since, the chronic care benefit has a dollar cap, the quantity of service available for the enrollee may have been less than feasible. Also, S/HMOs's incentives to subsidize their home care programs may have conflicted with the case manager's goal of maximizing the S/HMO chronic care benefit for the enrollee.

All the S/HMOs, including the 3 with their own home care programs, made contracts with home care and other agencies to provide chronic care services. However, they tended to contract with only small numbers of agencies and did not permit use of the chronic care funds for independently employed home care workers. These policies diminish the flexibility and perhaps the ultimate value of the chronic care benefit.

The S/HMOs provided nursing home care directly or under contract and had limited coverage under the chronic care benefit for nursing home care not ordinarily covered under Medicare. They did not cover any portion of the costs of assisted living or other residential programs with care attached. Such programs are becoming more available in the United States and consumers may prefer them over nursing homes. For a S/HMO to offer coverage for such care, decisions would need to be made about how to cost out and reimburse the care portion separately from the housing portion (which would be the client's responsibility). If a distinction between community benefits and nursing home benefits is maintained with separate caps for each, the S/HMO will also need to determine whether to count such services provided by residential settings under a nursing home care cap, count them under a home care cap, or allow them to be used for either.

Case managers were accountable for the management of the chronic care benefit. They had neither the responsibility nor the institutional arrangements to play a role in allocating the Medicare-covered LTC services and try to affect downward substitution of services.

Conclusions and Recommendations

The demand for LTC insurance was over-estimated in the S/HMO planning. The type of LTC insurance offered by the S/HMOs was particularly unattractive because it provides only modest front-end coverage, but it is unlikely that many older people would be willing to pay substantially for more complete coverage.

The S/HMOs as developed in the 1st generation did not develop a delivery system that controlled the costs of either acute care or LTC better than elsewhere. For S/HMOs to survive economically they must control acute-care utilization; control effects of moral hazard for all care, especially post-acute care and chronic care benefits; and avoid biased selection either through screening or product pricing.

The S/HMOs as developed in the 1st generation did not develop a delivery system that was likely to improve enrollee outcomes through state-of-the-art geriatric services, and efforts to integrate acute care, post-acute care, and other LTC. The 2nd generation S/HMO demonstration provides an opportunity for R&D efforts to develop and model this capacity.

The following recommendations were made:

Pricing and Content of the Chronic Care Benefit

- Premiums should be set at actuarial fair rates based on the enrollee's status at enrollment and queuing to limit the proportion of enrollees who are frail should not be a feature of the demonstration. (Our analyses suggest that there is latitude to reduce premiums, since two of the S/HMOs seemed to run profits in excess or premium levels.)

- S/HMOs should continue to receive 100% of the AAPCC and the nursing home cell rate for nursing home certifiable members.

- If possible, a limited lock-in feature should be developed so that S/HMOs are at financial risk for the effects of their care.

- S/HMOs should consider purchasing LTC insurance on the private market to cover additional care after the $6,000 -$12,000 current benefit has been spent.

- Chronic care benefits should be construed with annual rather than monthly caps.

- S\HMOs should cover a more flexible array of home-based services from a larger number of agencies, and they should explore covering services given by independently employed home care workers and even relatives of the enrollee.

- S\HMOs should cover care arrangements in residential settings other than nursing homes (such as assisted living programs) and such care should be able to be drawn down against both a community care and a nursing home care cap.

- S/HMOs should consider setting annual (and perhaps additional lifetime) caps for all services rather than having separate caps for community care and nursing home care to make the benefit more flexible. However, they may want to retain limits on expenditures for the nursing home portion.

Geriatric Care and Case Management

- S/HMOs should commit themselves to a combination of targeted geriatric care and case management designed to minimize iatrogenic problems; provide early attention to functional needs; allow for better decision making about acute-care, post-acute care, chronic care; and end-of-life decisions; and better health care in nursing home and home care settings.

• Case management should be integrated with the acute care programs through geographical proximity and better information systems, and should have a responsibility (along with the geriatric team) for managing Medicare-covered LTC as well as the additional chronic care benefits.

• Case managers need an information system to monitor the volume and costs of care actually received, not just the care authorized.

Solicitation for S/HMOs

• HCFA should solicit proposals that are already TEFRA HMOs or MIGs. HCFA might also consider solicitation of proposals from large medical clinics.

• The RFP should require applicants to demonstrate a commitment to a geriatric style of practice. At a minimum they should show that geriatrics (including geriatricians and geriatric nurse practitioners) are central rather than at the periphery of care or in a consultative role. Applicants should also be required to explain how the case management function will be integrated with the acute care and post-acute care programs.

• HCFA should continue to permit flexibility in the use of the chronic care benefit and applicants should be required to show how they will provide flexible residential and community care services to their enrollees and how they will avoid conflict of interest in the case managers.

Evaluability

• Because the S/HMOs will be at immediate financial risk, they will be unlikely to want to invest in an information system for evaluation. HCFA should require such a system and should consider paying for it.

• Each S/HMO is likely to be rather different, and to demonstrate different variations on the theme of geriatric care and case management. More will be learned if each program has sufficient numbers of severely impaired enrollees to permit within-site as well as across site analyses. HCFA should consider setting targets for enrollments of impaired persons that are much larger those of the 1st generation S/HMOs and selecting programs likely to be able to achieve those numbers.

• A information system should be developed at each S/HMO that allows creation of uniform data sets, including client descriptors and profiles of services used and costs incurred by each enrollee. These data are ultimately needed for evaluation and are also necessary for oeprational management of benefits.

INTRODUCTION

This study complements the work currently being undertaken at the Heller Policy Center at Brandeis University to design a 2nd Generation Social Health Maintenance Organization (S/HMO) Demonstration. Without developing detailed options for the 2nd Generation S/HMO Demonstration and duplicating the work undertaken by Brandeis, our multidisciplinary study group has examined factors that facilitated or impeded or dictated the direction of the 1st generation S/HMO demonstration through incentives that influenced the various participants. These participants include the organizations that sponsored S/HMOs, health professionals working within S/HMOs or their contracting organizations, older persons considering joining S/HMOs, older people already members of S/HMOs, Medicaid programs, and the federal government. We then considered the kind of incentives that might prevail under different demonstration arrangements that could be considered for the 2nd Generation S/HMO Demonstration, which was mandated by Congress in late 1991.

Our analysis of incentives for the 2nd Generation S/HMO demonstration is guided by two general considerations: (1) articulation of plausible and valuable purposes for a 2nd generation demonstration given what has already been learned from the initial demonstration; and (2) consideration of the goals of the 2nd generation demonstration given changes in context since the original S/HMOs were launched more than a decade ago. The latter includes changes in the policy context, in state and LTC delivery

systems, state-of-the-art understandings of geriatric medicine, and current thinking about ways of better linking acute care and long-term care (LTC).

Sources of Information

Time constraints and lack of OMB clearance precluded our doing full-scale surveys to examine past and probable future incentives for the major actors in the S/HMO demonstration. Our findings and recommendations, therefore, are based on the following:

a. theoretical analysis and review of research on incentives in health care;

b. review of the experience of the 1st Generation S/HMO Demonstration and the preliminary evaluation results;

c. review of relevant research in LTC, post-acute care, and relationships between acute care and LTC, enhanced by studies by Michael Finch, Robert Kane, and others on post-acute care, bundling of acute care and LTC, and implementation of the PACE demonstrations (which replicate the San Francisco-based On Lok program);

d. a recently completed survey by Robert Kane that examined geriatric medicine in all TEFRA HMOs;

e. current studies by Jon Christianson on the HMO market;

f. studies by Bryan Dowd and others on health insurance markets;

g. studies of case management in LTC.

Organization of the Report

The present report is organized in the following way: Chapter I provides background on the nature of the S/HMO concept, identifies the dual goals of the demonstration in terms of both delivery system change and financing change, and summarizes the characteristics of the original demonstration. Chapter II discusses incentives related to S/HMOs; it includes a general discussion of

the role of incentives in health care and briefly lists the types of incentives that proved relevant in the 1st generation demonstration and continue to be relevant to the second phase. Chapter III discusses findings from the 1st Generation S/HMO experience in so far as they reveal incentives (or at times lack of incentives) for key actors to change their behavior in desired ways. From this analysis, we draw the conclusion that the original S/HMO demonstrations did little to alter the behavior of most of the acute-care providers who came into contact with S/HMO members. We also identify a tension in the original demonstration design between efforts to limit the financial risks for S/HMOs and efforts to provide an attractive package of benefits for consumers.

Chapters IV and V deal with the issues related to the design of the 2nd Generation S/HMO demonstration given the changed health care context, including the growth of LTC financing programs in the past decade and the growing understanding both of the effectiveness of geriatric interventions and the disincentives for their implementation. Chapter IV enumerates these contextual effects and design decisions regarding of the 2nd Generation S/HMO demonstration that will alter incentives in various ways. It then discusses issues related to sponsorship of S/HMOs and the value of the chronic care benefits to consumers.

Chapter V discusses issues related to the S/HMO delivery system. The chapter discusses advances in geriatric medicine and ways that S/HMOs might demonstrate state of the art approaches to integrating acute and long-term care benefits. It also discusses

issues about the chronic care benefit and the case management feature, given the context for a phase II demonstration.

Chapter VI offers recommendations for the 2nd generation S/HMO demonstration based on the foregoing analyses. We comment on the likely effect on various actors of modifying selected features in the demonstration design, particularly queuing, lack of lock-in provisions, reimbursement, and benefits. We argue that the 2nd generation S/HMO provide a true test of integrated acute and long-term care, and that the chronic care benefit be altered to meet these goals. We also comment on some features related to evaluating the 2nd generation demonstration.

CHAPTER I: S/HMO BACKGROUND: CONCEPT AND DEMONSTRATION DEFINITION

A Social Health Maintenance Organization (S/HMO) is a health care provider that enrolls Medicare beneficiaries on a capitated basis and undertakes to provide them with both acute care (at a minimum all the hospital, physician, post-acute care and other benefits that would be covered under fee-for-service Medicare) and additional, socially-oriented long-term care (LTC) benefits. The S/HMO's financing comes from fixed annual payments from the Medicare program on behalf of each member and additional monthly fees from each member, the latter to finance the chronic care benefits.

In its simplest expression the S/HMO was a mechanism to transfer some money spent on acute care for the elderly to an investment in LTC, and to transfer some money spent on health-oriented "medical model" long-term care services to an investment in socially oriented LTC services. It builds on the concept of the Health Maintenance Organization (HMO), which had its origin in American medicine in the 1930s and 1940s with the Kaiser Permanente health plans. HMOs are financed through capitation and presumably the health care providers have an incentive to invest in preventive medicine and primary care to forestall later heavier expenses. The "S" in S/HMO was to be the additional element--i.e. socially oriented LTC services. The S/HMO idea was advanced at scientific meetings in the 1970s, but by the time it was implemented in 1985, TEFRA HMOs (allowing capitated Medicare benefits) had been in place since 1982. Thus a mechanism was

available by which HMOs in general could enroll Medicare beneficiaries whose Medicare benefits were consigned to the HMO in the form of an average annual payment and who, in return, received all the acute care they would receive under fee-for-service Medicare and any enriched benefits that the TEFRA HMO cared to offer. (Additional premiums are sometimes charged for the latter.) From a consumer's perspective, then, S/HMOs must be compared in price and benefits to the TEFRA HMOs available in the market area.

Original Concept

The S/HMO demonstration grew from ideas first advanced by Robert Morris, then of Brandeis University, and others who called attention to the biases that tilt the health care delivery system toward expensive acute care services rather than presumably more efficient and perhaps more appropriate LTC services, and to expensive "medical model" LTC services rather than presumably more efficient and perhaps more appropriate social services. It was expected that planning for care of an individual in a S/HMO would result in trading off some hospital care for LTC, and some institutionally-based LTC for home-based care. Presumably this would lead to better and more satisfying outcomes for the members, and to the ability to provide more flexible services at affordable prices. Although the S/HMO was meant to achieve efficiencies, it is unclear whether the goal was to demonstrate that the overall cost of combined acute care and LTC could be

reduced or to demonstrate that more or better care with better results could be purchased for the same price.

Reconstructing the concept of the S/HMO at this juncture is somewhat difficult. The demonstration project, initiated in 1985, had a life of its own. As sponsors for the first four S/HMOs were recruited and details of the demonstration worked out, the original goals became somewhat lost in the pursuit of intermediate goals. The latter included the need to attract sponsors willing to constitute themselves as S/HMOs, the need to attract members, and the need to quickly develop the mix of functionally impaired and unimpaired S/HMO members needed for demonstration purposes while avoiding adverse selection.

Demonstration Project

The S/HMO was demonstrated at 4 sites. As has been thoroughly described by technical assistants at Brandeis University and by the S/HMO evaluators at University of California at San Francisco (UCSF), the 4 projects differ from each other in some respects. They are most readily divided into pairs, with distinctions made between Medicare Plus II (sponsored by Kaiser of Oregon) and Seniors Plus (sponsored by Group Health of Minneapolis in partnership with the Ebenezer Society), on the one hand, and SCAN Health Plan in Long Beach, California and Elderplan in Brooklyn, on the other. Although differences can be identified within the pairs, Medicare Plus II and Seniors Plus have in common that they were sponsored by established HMOs that already offered a TEFRA HMO plan prior to initiating a S/HMO. In

contrast, sponsors of SCAN (an LTC case management program) and Eldercare (an LTC facility) needed to create an HMO mechanism and linkages to a medical group and to hospitals.

In general, the S/HMO included 4 organizational and financing features:

(1) a single organizational structure at financial risk to provide a full range of acute and chronic care benefits to voluntarily enrolled Medicare beneficiaries who pay a monthly premium and receive, in addition to basic Medicare benefits, a package of chronic care benefits such as nursing home and home health care (not covered by Medicare), homemaker, personal care, and adult day care; and supplemental medical benefits such as outpatient drugs, dentistry, and transportation, not covered under Medicare;

(2) a coordinated case management system to authorize chronic care benefits for those who meet the established disability levels within fixed annual caps for those services;

(3) controlled enrollment of a cross-section of functionally impaired and unimpaired elderly; and

(4) financing through prepaid capitation, pooling funds from Medicare, Medicaid (if applicable), and member premiums as well as member copayments for the chronic care benefit.

Some conditions of the S/HMOs were established as part of the program design and were uniform across the 4 programs, whereas others were established at the discretion of the sites. Core features and variations in the S/HMOs are described below based on their first 5 years of performance, 1985-1989.

Uniform and Distinctive Elements

Benefits

Although it was generally understood that S/HMOs would offer all physician, hospital, and post-acute care benefits offered

under Medicare fee-for-service and additional community-based and institutional LTC, sites had discretion over the amount and type of non-Medicare benefits included. At the outset, the most generous chronic care benefits were offered by Medicare Plus II with a $12,000 per year cap on home and community care expenditures, $12,000 per year or 100 days per stay in the chronic care nursing home benefit, and an overall limit of $12,000 per year for the chronic care benefit. SCAN Health Plan followed with $7,500 per year for either home and community care or nursing home chronic care, and an overall limit of $7,500 per year with an additional $9,400 per lifetime for community care and $9,400 per lifetime for additional chronic care. Elderplan's limits were $6,500 for home and community care, nursing home care, or both each year; and Senior's Plus had limits of $6,250 per year for home and community care, nursing home care, or both, with an additional lifetime amount of $7,800 for nursing home care. These remained unchanged until 1988 when SCAN began imposing a monthly cap of $625 on its benefits and limiting nursing home benefits to 21 days per stay. In 1988 Seniors Plus increased its benefit cap from $6,250 a year to $7,200 and changed its nursing home benefit to 21 days per spell of illness (removing the additional lifetime benefit).

In addition to the chronic care benefits, all sites offered a range of supplemental medical benefits, including prescription drugs, eyeglasses, hearing aides, and nonemergency transportation. All sites included drug benefits with minimal

copayments ($1-$3 per prescription). In 1989 SCAN Health Plan changed its copayment to $3 and set a $1,000 limit for 1990. Elderplan and Scan Health Plan offered dental benefits, and Seniors Plus offered preventive dental benefits until 1988. Elderplan and Seniors Plus offered routine foot care, whereas the other two sites offered only medically necessary podiatry.

Financing

Through Medicare waivers, the S/HMOs received 100% of the AAPCC, in contrast to the 95% of the AAPCC received by TEFRA HMOs. In addition, the S/HMOs received the nursing home cell rate of the AAPCC for all enrollees who were nursing home certifiable regardless of whether they were receiving nursing home care or, for that matter, whether they used any of the chronic care benefits at all. All S/HMOs charged monthly premiums, which varied from site to site, and exacted consumer copays for the chronic care benefits, which also varied from site to site. Monthly premiums in 1985 varied from $29.50 at Seniors Plus to $49 at Medicare Plus II; by 1989 the premiums ranged from $29.89 at Elderplan (which had kept its premium constant over those 4 years) to $57.85 at Elderplan. Copayments in 1985 were set at 10% of charges for both home care and nursing home care at Medicare Plus II; 10% of home care and 20% of nursing home charges at Elderplan; 20% of charges for both home care and nursing home care at Seniors Plus; and $5 per home care visit and 15% of nursing home charges at SCAN health plan. These remained essentially unchanged through 1989 except for SCAN Health Plan,

which raised home care visit copays to $7.50 and nursing home copays to 20% of charges in 1988.

Case Management

Each S/HMO developed a case management unit (called resource coordination at Medicare Plus II) to determine eligibility for the chronic care benefits, allocate those benefits, and assist the enrollees in managing their care. Certain aspects of the case management process were standardized across sites, including the Health Screening Form (HSF) which is completed at enrollment and annually, and the Comprehensive Assessment Form (CAF) which forms the basis for the chronic care plan. Enrollees become candidates for a CAF if their HSF is flagged as indicating high risks, if they are referred by medical clinics or hospitals, or if they or their families request assistance. In general, the case managers provide the initial assessment and ongoing monitoring of the enrollee's situation, though the details of this monitoring and the general staffing of the case management units varied across sites and within sites over time.

Sites used the criteria within their own states for nursing home certifiability, which, in turn, triggered the higher AAPCC. However, sites established their own eligibility levels for chronic care services. During the initial 5 years, Medicare Plus II limited its benefits to severely impaired persons who met Oregon's nursing home certifiability criteria. Initially Elderplan and Scan Health Plan offered chronic care benefits to persons they defined as moderately impaired as well as severely

impaired; the former removed the benefits for moderately impaired in 1986 and the latter in 1988. Seniors Plus offered its chronic care benefits to all members regardless of disability levels, and continued to do so for the first 5 years of the program.

Queuing

The S/HMOs were permitted to limit the proportion of persons who were severely impaired (i.e. nursing home certifiable) to approximately 5% of their community-dwelling members. Unlike TEFRA HMOs, they were permitted to use functional health status screening, and place severely and moderately impaired applicants in a queue until the plan could accommodate additional enrollees with disabilities. All sites except Medicare Plus II availed themselves of the queuing option at various times in the first 4 years, with Seniors Plus using queuing from November 1985-1989 because their enrolled population was more disabled than the population in Seniors, their basic Medicare plan.

Sponsors and Philosophy

As indicated, Seniors Plus and Medicare Plus II, both sponsored by established HMOs with operating TEFRA plans, resemble each other organizationally more than they do the remaining S/HMOs. But the two HMO-based S/HMOs differ from each other as well. Leaders at Medicare Plus II used the S/HMO deliberately to demonstrate the feasibility and effectiveness of adding additional chronic care benefits to a TEFRA plan. Resource coordinators at Medicare Plus II become involved with a hospitalized client only after all the regular Medicare-covered

benefits have been exhausted. Thus hospital discharge planners and Kaiser's certified home care agency are involved first, referring to the S/HMO resource coordinators when additional care is needed that is not covered by Medicare.

Seniors Plus was formed through a partnership between Group Health and the Ebenezer Society, with both partners at equal financial risk. The Ebenezer Society is, among other things, a long-term care provider. Its operation includes a highly skilled nursing home (the Caroline Center), which offers inpatient rehabilitation, "super-skilled" care, and day care, as well as regular nursing home care; several intermediate care facilities; a home care program; high-rise senior housing buildings; and case management services. The S/HMO's case management and first-line LTC services were located with Ebenezer, and substantial efforts were made to use the LTC services more effectively in conjunction with acute-care services. Proactive attempts were made to identify S/HMO members at medical clinics, in hospitals, and in nursing homes, and to arrange for more efficient approaches even while the member was still receiving Medicare-covered services. This included stationing a S/HMO nurse practitioner at clinics serving large numbers of S/HMO members, and using the Caroline Center deliberately for short nursing home stays (sometimes in lieu of hospital) and vigorous rehabilitation.

It is important to note, however, that both Kaiser and Group Health conceptualized care of the elderly as the province of all primary care physicians and specialists, although neither created

special care roles for geriatric medicine. The medical directors of the S/HMO at both sites were geriatricians who were expected to carry a regular patient load and care for adults of all ages. Their function in the S/HMO team was more to critique the work of the physician of record than to modify it. Neither sponsor attempted to make dramatic changes in the way medical care was delivered to its S/HMO members, and the challenge of communicating the mission of the S/HMO to large numbers of attending physicians in the plans (most of whom might have only a few S/HMO members in their patient loads) was formidable.

Elderplan and Scan Health Plan both began with a high commitment to developing new and better ways to provide coordinated acute care and LTC to their enrollees. But both needed to develop de novo their physician services, their hospital services, their relationships with home care providers, and (in the case of SCAN) their relationships with nursing homes. As Chapter III summarizes, building the infrastructure was difficult for both these plans, involving false starts and, in some cases, introduction of incentives for participating providers that were contrary to the original purposes of the S/HMOs.

CHAPTER II: INCENTIVES AND S/HMOS

All participants in health care delivery--professionals, health care organizations, health care consumers, and patients--respond to incentives. That is, they act in what they believe to be their rational self-interest. To respond accurately to incentives inherent in their situation and to exercise choices according to an objective view of their self-interest, the various participants must also be well informed. It is well known, for example, that consumers of health care plans and of health care itself are not always well informed about the costs and benefits of the options open to them. It is less well recognized that health care providers may be uninformed about their financial interests.

Theoretical S/HMO Incentives

In theory at least, the S/HMO is designed so that the economic incentives of health providers will be consistent with best practices in acute care and LTC delivery. The S/HMO organization should provide a disincentive to over-use expensive hospital care (like all HMOs) and an incentive to use preventive health care to forestall later more expensive care, and to use downward substitutions among types of care when a less expensive form of care can achieve the same result. (However, as Chapter V suggests, conventional "prevention" may have less payoff for the older person than prevention of iatrogenic problems.) Since it is widely believed that older persons are harmed by prolonged stays in hospitals that are rarely geared to help them retain

their functional abilities, substituting outpatient care, nursing home care, and home care for some hospital care may benefit the patient. For this to occur, of course, nursing homes must also be philosophically and technically prepared to treat residents with relatively short-term needs, to have a vigorous rehabilitation thrust when appropriate, and to assist residents in making plans for discharge from nursing homes (where possibly the pressures for early discharge will be less intense and the decision-making milieu more conducive to better planning).

From the perspective of a patient or a potential patient about to purchase health care protection beyond that offered with fee-for-service Medicare benefits, the S/HMO was theoretically a good choice. It would provide coverage for home care and nursing home care not available under Medicare's hospital and post-acute care benefits; it would provide them with an organized health care provider and a case-managed system to assist in identifying their needs and helping them get ready access to services of reputable quality; and it would allow purchase of this coverage for less than comparable packages that they could otherwise purchase. If a S/HMO were working as expected, the older member would be buying two kinds of protection that older people find very important: (1) they would be decreasing their likelihood of being admitted to a nursing home because of the increased home care service; and (2) they would be protecting some of their assets against the high costs of LTC either at home or in nursing homes. The latter effect is modest because of benefit caps

Actual Demonstration Incentives

We argue that the incentives that were meant to operate so that S/HMOs could do well while doing good for their elderly members were far from fully in force during the S/HMO first generation demonstration. The reasons include:

- Some S/HMO internal arrangements were such that key providers (including physicians, hospitals, and nursing homes) had no particular incentive to reduce the amount of their services. Indeed some key participants were paid according to volume of service.

- At least at 3 of the sites (Elderplan excepted), physicians were simply unaware that some of their patients were also S/HMO members and that both the patient and the physician would benefit by a different strategy towards care.

- Related to the above point, some unexpected incentives operated for salaried physicians, who sometimes acted to maximize their spare time or convenience in spending time with S/HMO enrollees, visiting nursing homes, or making referrals to medical specialists.

- Because patients could leave the S/HMO at any time, the incentive for the S/HMO to invest in preventive expenses was lessened.

- The chronic care benefits to the S/HMO member were circumscribed.

- Despite the chronic care benefits, some members disenrolled (when they could afford to, perhaps because they had retained medigap policies, or perhaps because they could afford the coinsurance) in order to receive acute hospital or physician care that they deemed necessary when they became ill. For older people to have an incentive to behave so as to receive additional chronic care benefits, they must believe either that the acute-care benefits they are receiving are as good as the benefits offer by other arrangements, or they must be willing to relinquish some desirable features of acute care in order to retain the additional chronic care benefits.

- As the next chapter will show, the planned integration of acute-care and LTC planning and delivery occurred only to a limited extent. At Medicare Plus II, S/HMO leaders stated from the outset that their intent was to test the effectiveness of an LTC add-on benefit after Medicare-

covered post-acute care benefits were exhausted and no efforts were made to plan for the care as a whole or to station persons with a "S/HMO philosophy" strategically at points where major decisions were being made for and by the patients. Despite their intentions to the contrary, the other S/HMOs tended to graft case-managed LTC onto an almost unchanged health care delivery system. Thus, there was little reason to expect clients to receive markedly more effective or efficient combined acute- and LTC, nor that the S/HMOs would benefit financially from those efficiencies.

The S/HMO demonstration was also somewhat disappointing because it failed to attract much participation of Medicaid programs and Medicaid participants. The Oregon Medicaid program declined to participate at all, seemingly because state officials felt that the state's varied repertoire of Medicaid and Medicaid-waiver programs would be more cost-effective than payment of S/HMO premiums on behalf of low- income persons in the catchment area.

Given that the demonstration was structured with a limited LTC community benefit and a very limited LTC nursing home benefit, the S/HMOs had a financial incentive to use and spend-down the chronic care benefit rather than to offer post-acute care services under Medicare, for which the S/HMO was fully responsible. There is no evidence, however, that S/HMOs acted upon this perverse incentive. Case managers seemed straightforward in their advocacy for the enrollee within the limits of program rules. Moreover, the fragmentation between use of Medicare post-acute care and use of the chronic care benefit (described below) made this kind of "gaming" difficult. Similarly, case managers had an incentive to mobilize community

resources outside the S/HMO in behalf of the clients, although it is also unclear how much they acted upon it.

Design Features Favoring S/HMO Sponsors

A time-limited demonstration project is inevitably an imperfect test of incentives that would follow from changed ways of financing and delivering health care. Both providers and consumers know that the project will end, and, therefore, neither can put their full trust in the stability of the arrangements. The S/HMO demonstration, nonetheless, required that potential S/HMO providers accept financial risk to test a theoretical tenet that providers would find the merging of acute and LTC financially viable. Compromises to cushion this risk were built into the design, namely:

- HCFA shared financial risk with the S/HMOs for the first 2 years of the demonstration;
- the S/HMOs received 2 financially desirable benefits over other Medicare HMOs in the setting of rates. First, they received 100% rather than 95% of the adjusted AAPCC. Second, they received the nursing home cell rate for all nursing-home-certifiable S/HMO members regardless of whether that member was in a nursing home or whether he or she was receiving any chronic care benefits;
- the S/HMOs were permitted to do prior health screening and were required to enroll only 5% of the total members who were severely impaired. This queuing system protected the S/HMOs against adverse selection.

These strategies, which made recruitment of S/HMO sponsors more feasible, also provided highly favorable conditions for S/HMOs to do well financially. In fact, S/HMOs used the nursing home cell rates for many nursing home certifiable members who received no chronic care benefits at all. TEFRA HMOs that sponsored S/HMOs

should have done particularly well by encouraging conversions to the S/HMO.

Concerns of Consumers

The evaluators of the S/HMO demonstration point out that consumers were particularly reluctant to change their physicians in order to enter S/HMOs. Further, it seems that consumers were often unclear about the unique nature of the S/HMO benefit compared to Medicare fee-for-service or TEFRA HMO benefits. This lack of clarity concerned both what was being offered by the S/HMO and the extent to which Medicare covered LTC (which some consumers over-estimated). Lack of awareness of the S/HMO benefit is unsurprising because the S/HMOs tended to market themselves as comprehensive health plans (i.e. enriched TEFRA plans), emphasizing drug benefits, dental benefits, and other extended health benefits that competed well with TEFRA HMOs in their market.

Information

As suggested above, the information understood by both providers and consumers was imperfect. For example, physicians at Medicare Plus II and Seniors Plus, seemingly unaware of the insurance features being demonstrated by the S/HMOs, sometimes advised their elderly patients that they were not yet sick enough to join the S/HMO. Potential consumers had imperfect information, sometimes exacerbated as a result of marketing campaigns designed to prevent adverse selection. In considering incentives in the S/HMOs and planning for the next generation, HCFA should consider

that perceptions of reality by consumers, sponsors, and providers may be as important as actual incentives built into the program.

Table 2.1 summarizes the incentives that could be operating for providers and consumers in the S/HMOs. The next chapter briefly summarizes the lessons that can be drawn thus far from the 1st generation demonstration with particular attention to these issues.

Table 2.1.

Potential Incentives to Enrich in the S/HMO Program

Incentive	Positive	Negative
Sponsors	Making a profit --100% AAPCC --nursing home rates for n.h. certifiable	Concern about profit --distrust of AAPCC
	Market share	Oversight of financial & other records
	Cost-shifting possible	General industry perceptions of TEFRA HMOs
	Prestige of experiment	
	R&D nature of experiment	
Consumers	Better care for $	Continuity of physician
	Protection from nursing home admission	Choice of physician
	Asset protection	Choice of hospital
	Minimize out-of-pocket costs	Flexibility in LTC provision
		Flexibility to move out of area
		Possible undertreatment
Providers in S/HMOs	Increase referrals	Loss of control/turf
	Increase profits	Oversight by S/HMO
	Interesting program	Unfavorable financial arrangements
	More services available to their clientele	

CHAPTER III: LESSONS FROM THE FIRST GENERATION

What was learned from the first generation S/HMO demonstration that might help shape decisions about further research and demonstration with this concept? HCFA contracted with evaluators from the University of California at San Francisco to examine the experience of the S/HMOs. Although not all the results are complete, striking findings emerge that should be taken into account in future planning. The points below are drawn, in an over-simplified fashion, from information generously shared by the S/HMO evaluators. Some of the insights were also gleaned from University of Minnesota site visits to all S/HMOs in 1988 to explore the implementation of the case management process and the extent to which acute care and LTC had been integrated.

Insights from Process Evaluation

Start-Up

The S/HMOs were slow to achieve their desired complement of members. Except for Medicare Plus II, they incurred unexpectedly high marketing costs. To compete with other prepaid plans in the market, most offered enriched Medicare benefits for drugs, dental services, eyeglasses and hearing aides, and/or transportation, as well as the chronic care benefits inherent in S/HMOs. In part because of perceived consumer demand and in part to discourage adverse selection, most of the marketing emphasized these added benefits in a system of comprehensive care rather than chronic care benefits per se.

HMO vs Non-HMO Sponsors

HMO sponsors experienced fewer difficulties in achieving a stable state than the two other sponsors. Scan Health Plan and Eldercare had great difficulties in establishing relationships with a medical group and with hospitals. Because they needed to invest more in developing the infrastructure to run an S/HMO, their costs per member were more difficult to bring under control, and their administrative costs were a much higher proportion of total expenditures. Indeed, the experience of the 1st generation suggests that established prepaid health care providers are by far the best sponsors for S/HMOs.

Delivery System Changes

For the most part the S/HMOs did not change the nature of health care for the elderly. Fragmentation between acute-care and LTC remained; the case management was directed primarily at the long-term care benefit. Systems for hospital discharge planning and acute-care utilization review existed alongside the case management system for the chronic care benefit. There was little organized effort in geriatric assessment or practice of geriatric medicine within the S/HMOs. The typical course of hospital care for S/HMO members was unchanged and not particularly sensitive to the needs of geriatric patients. Neither of the S/HMO sponsors designated geriatric specialists to care for S/HMO members, and indeed the latter were not recognized as part of the care system. Physicians within the HMOs typically had only a few S/HMO members in their patient-loads and were little aware of their special

status and its implications. There were some efforts, particularly at Senior Plus and initially at Elderplan, to use geriatric nurse practitioners as case finders in medical clinics or in hospitals; to use nursing home stays designed in lieu of or to shorten hospital stays as opportunities for vigorous attempts at rehabilitation; and/ or to influence the quality of community LTC providers. On the whole, however, acute care and LTC remained rather distinct, and neither was particularly innovative. For example, regarding the latter, the community care typically came from Medicare-certified home health agencies, organized homemaking and personal care agencies, and day care programs. Although case managers describe efforts to organize unusual services through community resources, the S/HMOs did not appear to use the purchasing power of the chronic care benefits in that way.

Case Management

Case management ultimately had two functions in the S/HMO. Its primary function was to allocate and manage the chronic care benefit; also determined nursing home certifiability, which triggered a higher AAPCC rate for members regardless of whether they used or needed long-term care services. Thus, the periodic reassessments by the case managers fulfilled a "revenue-generating" as much as a "benefit-triggering" function.

Case management to mediate the chronic care benefit, almost by default, became the most distinctive hallmark of the S/HMO. Technical assistants at Brandeis University were skilled and

experienced in LTC demonstrations, assessment technology, targeting benefits to those in need, and attempting to assure that formal community care would not markedly replace family care. The technical assistants did not have particular background or strength in geriatric medicine, and perhaps, therefore, concentrated technical assistance on the former. The case management units became ever more adept at assessing needs, developing care plans, and serving as gatekeepers to, as well as managers of, the extended care benefit.

The case management programs at the S/HMOs, especially initially, were characterized by a spirit of excitement. Although conscious that they were part of an experiment that needed to demonstrate cost-effectiveness, they were also motivated by a sincere effort to assist older disabled people to remain at home, and they believed they were doing so. Despite considerable turnover in most S/HMO case management programs, this enthusiasm remained relatively high over the life of the demonstration. Case managers point with pride to innovative care-conference formats or (at Seniors Plus) an ethics committee structure. There is no evidence at all that case managers attempted to take advantage of some of the perverse incentives possible in the S/HMOs--e.g. using chronic care benefits, which were finite, in instances when a case might have been made for using the Medicare post-acute benefits, which were open-ended, or encouraging persons who had permanently entered a nursing home to disenroll before their S/HMO nursing home benefits were exhausted. As stated above,

case managers were somewhat removed from the mainstream of health care and reluctant to confront the system when physician decisions were involved.

On the other hand, case management programs became more stringent over time in their monitoring of services that would be offered to those who were nursing home certifiable. They also were variable in their efforts and ability to pick up early needs through following up on the annual health screening forms (HSFs) completed by each member. As expected, they vigorously identified nursing home-certifiable members, a status which had immediate payoff in a higher AAPCC for the S/HMO.

Consumer Views

As indicated in the previous chapter, comparisons of S/HMO enrollees, TEFRA HMO enrollees, and fee-for-service Medicare beneficiaries in the market areas showed considerable confusion and misinformation about benefits available. Awareness of the S/HMO was not high among non S/HMO members. On the other hand, those who did enroll in S/HMOs were clearly sensitive to many of the positive aspects of the plan they had selected. This was evidenced by disenrollments following reductions of drug or dental benefits. On the other hand, nursing home benefits must not have been as important a consumer benefit because several S/HMOs judged correctly that they could weaken the nursing home benefit by reducing its annual or lifetime amounts or by changing the benefit from once per year to once per episode of illness without risking disenrollment.

The need to change physicians was cited as a reason for not joining an S/HMO (a reason that did not apply, of course, to roll-overs from Group Health of Kaiser TEFRA plans), and desire for choice of physician or hospital was cited as a reason to drop out of S/HMOs. Similarly, the value of the chronic care benefit of SCAN health plan was reduced markedly when the plan changed from an annual cap to a monthly cap (thereby reducing the benefit for clients who might need for service for only part of the year). This change, too, seemed to occur without negative reaction from members, and it was touted by the case management group as a creative way of joining the client's family in financial planning for cost-sharing to make sure the benefit stretched across the calendar year.

Sponsor and Provider Attitudes

As suggested in the previous chapter, physicians and hospital, nursing home, and home care personnel connected with S/HMOs were not always aware that they were participating in a demonstration. Even when financial incentives had been developed for the participating organizations (in the form, for example, of capitation and/or sharing in saved money), the individual provider may well have been unaware of the incentive. At SCAN Health Plan, physicians in the participating preferred provider organization (PPO) thought that their financial arrangements were inadequate compared to those of other prepaid systems and even encouraged their patients with greatest needs to disenroll. At Elderplan, where the physician group was changed several times,

the last group practice undertaking medical care was well aware of its financial incentives. This group, however, was unsatisfied with the performance of the case management unit and introduced its own discharge planners and managers to facilitate efficient care.

Even direct sponsors of the S/HMOs did not always convey the financial incentives in terms meaningful to their staffs. Physicians at Group Health and Kaiser, both staff model HMOs, perceived a disincentive to spend additional time with or planning for S/HMO members because of the expectations for volume in the medical clinics and the way their time was scheduled. Staff at the Caroline Center, a skilled nursing home and rehabilitation program the Ebenezer Society, which was a full partner in Senior Plus, reportedly was resentful of efforts to move S/HMO members so quickly through the program that they would be discharged before their formal admission care conference had been scheduled. These anecdotes illustrate the difficulties in assuming that personnel in a complex system of care will be captivated by and enthusiastic about the overall goals of a demonstration without deliberate efforts to bring about that commitment.

Lessons from Outcome Evaluation

In brief, it appears from the evaluation results that S/HMOs experienced favorable disenrollment and mortality (that is, the more disabled members tended to disenroll or die) compared to fee-for-service care and even to other TEFRA HMO care. Moreover,

it also appears that case-mix-adjusted mortality rates are higher for S/HMO members than the other two groups. If this finding is correct, it suggests that mid-course correction is needed.

It also appears that, despite favorable AAPCC calculations, queuing, favorable selection and disenrollment and fairly limited chronic care benefits, the S/HMOs had difficulty breaking even and sometimes ran at a loss. It is important to note, however, that the evaluator had no audit capacity, nor were comparative data for the TEFRA HMOs and the S/HMO made available for the two HMO sponsors. Without the audit capacity or clarity about which costs were attributed to S/HMOs (and bearing in mind that an HMO has an incentive to keep the future AAPCC rates as high as possible), some skepticism about these data on financial bottom-lines is probably merited. In any event, the bulk of the costs of the S/HMO's even for the 5% who were nursing home certifiable, is attributable to the acute-care, "regular Medicare," portion of the benefit, rather than the LTC portion.

Table 3.1 compares the distribution of expenditures for the 4 S/HMOs in 1985 and 1989, the last year for which data are available. All S/HMOs but Kaiser spent a high proportion of their expenditures per member per month on administrative costs and marketing, and the newly founded HMOs were much worse in that regard than the established HMOs. Elderplan came down from a high 57% of its reported expenditures on administration in 1985 to 11%, but SCAN was still spending a quarter of its reported

Table 3.1

Distribution of Costs per Member Month for S/HMOs, by category of expenditure, 1985 and 1989

Cost per member month[a]	Elderplan 1985	Elderplan 1989	Seniors Plus 1985	Seniors Plus 1989	Medicare Plus II 1985	Medicare Plus II 1989	SCAN 1985	SCAN 1989
Total	$684	$403	$434	$331	$267	$357	$551	$404
	100%	100%	100%	100%	100%	100%	100%	100%
Hospital	82	134	69	108	107	142	103	119
	12%	32%	16%	33%	40%	40%	19%	29%
Other Medicare[b]	132	114	107	142	108	148	90	128
	19%	32%	25%	43%	41%	42%	16%	43%
Chronic care[c]	25	44	40	28	21	29	33	19
	4%	11%	9%	8%	8%	8%	6%	5%
Expanded care[d]	31	52	25	26	20	24	31	39
	5%	13%	6%	8%	7%	7%	6%	10%
Case managem't	24	6	39	7	5	7	22	11
	4%	2%	9%	2%	2%	2%	4%	3%
Admini-stration[e]	390	42	155	20	7	5	272	88
	57%	11%	36%	6%	3%	2%	49%	22%

[a] Expenditures and percents are rounded to nearest dollar or whole number, and the latter, thus, may do not total 100%.
[b] Includes ambulatory encounters (by far the largest share), Medicare SNF and home health, and durable medical equipment.
[c] Includes non-Medicare home health and nursing home, and other home care and day care.
[d] Includes dental;, drug, vision, hearing aides, transportation, and medical transportation.
[e] Includes marketing; administrative salaries, rent, and depreciation; and capital costs. (Medicare Plus II had no capital costs.

Adapted from Harrington & Newcomer, 1991.

expenditures per member on administration in 1989. Case management never represented more than 4% of expenditures per member per month except for Seniors Plus (9% in 1985), but it brought those costs down to 2% by 1989. Hospital and ambulatory encounters were by far the greatest direct patient care expenditures, and most of the direct patient care expenditures fell under Medicare's regular commitments. Expanded care expenditures tended to be equal or greater than the chronic care expenditures.

Despite inflation, over the 5 year period the expenditures on chronic care went down markedly in absolute terms at both SCAN and Seniors Plus and remained constant as a percentage of expenditures at Medicare Plus II. But, at no point in the 5 year period did chronic care costs exceed 11% of the expenditures per member per month for any S/HMO (averaging 7% across the sites in 1985 and 8% in 1989). Perhaps this means that the enormous emphasis on controlling utilization of the chronic benefit through case management paid off. On the other hand, it may also mean that those efforts were misplaced, given higher costs elsewhere.

Summary

From the 1st generation S/HMO, we conclude the following:

1. The practice did not really match the theory. There were few opportunities for LTC to be used as an effective and efficient tradeoff for acute care, and innovative practices in

acute care and LTC did not develop because of the financial and organizational structure of the S/HMOs.

2. The benefits were set to minimize risks; chronic care benefits were modest and carried considerable copayments. The S/HMOs could set benefit packages at their discretion and tended to emphasize expanded health benefits so that they resembled highly enriched TEFRA HMOs as much as new vehicles for LTC. There is reason to believe that many consumers also perceived them in that light.

3. The S/HMOs were able to develop a relatively inexpensive case management function and to control the expenditures on the chronic care benefit, which indeed seemed, generally, to be compensated for by the additional premiums paid by members and AAPCC payments made by HCFA. The bulk of the reported direct care expenditures were for hospital, ambulatory care, and other expected Medicare post-acute and durable equipment benefits. Administrative and marketing costs were high initially at all sites except Kaiser (where most of the members rolled over from the TEFRA HMO), and they remained high at SCAN. Case management itself was relatively inexpensive per member per month.

4. Initial information about disenrollment and mortality is disappointing.

5. In the 1st generation, the S/HMOs may have attempted to demonstrate too much at once with their hope to simultaneously show the advantages of an insurance mechanism for LTC and acute care combined, capitated financing that allowed tradeoffs between

acute and LTC, and greater benefits for the members because of the integration of acute care and LTC.

6. Finally, it appears that information was not readily available to evaluate the S/HMOs or to compare the regular TEFRA HMOs to the S/HMOs.

The Value Added of the S/HMO to the Comsumer

The S/HMO was intended to combine acute care and long-term care with the expectation that greater coordination could achieve savings. The first round of operational projects developed programs that resembled what subsequently became TEFRA HMOs to which were grafted limited coverage for long-term care. These fixed benefits, usually in the range of $6000 to $12,000, can be seen as comparable to the front-end coverage proposed by the recent Pepper Commission (1989) on long-term care.

Two critical assumptions underlie the logic of the original S/HMO concept. The first is that there is widespread consumer demand for LTC insurance. The second is that the price of LTC insurance to consumers can be lowered by managed care. That is, the Social HMO with its added LTC services would be an attractive product to an elderly population. As we shall see, neither of these assumptions has strong empirical support, though evidence does suggest that, in the abstract, consumers would like coverage for LTC care.

We argue that consumer reluctance to purchase market rate LTC insurance is a de facto barrier to the success of any S/HMO in light of the S/HMOs' inability to demonstrate significant reduction of actuarial risks which affect the pricing of LTC insurance. Our discussion includes: (1) the dual roles of both consumer demand and the supply of LTC insurance; (2) consumer opinions concerning LTC insurance and trends in pricing LTC insurance; and (3) alternatives available to S/HMOs to address

consumer attitudes toward LTC insurance and provide comparisons of chronic care benefits, estimated cost and the financial viability of the current generation of S/HMOs.

LTC Insurance: State of the Field

The supply of LTC insurance has increased dramatically since the conception of S/HMOs, as has consumer demand, yet overall penetration remains minuscule. In 1990 there were at least 134 firms selling LTC insurance. This is an increase in the number of firms selling LTC insurance of 79% since 1987 and 13% since 1989. Likewise, the number of policies sold has increased dramatically from 1987 to mid-1990 with an average annual growth rate of 30%. But while these percentages are impressive the actual number of policies sold remains quite small when compared to the population at risk. In 1991, only 1,650,000 policies were sold (Van Gelder and Johnson, 1991) and fewer than 1,000,00 were in force (Wiener, 1991).

While the LTC insurance market has evolved markedly since the mid-eighties, numerous barriers to the wide-spread purchase of LTC insurance abound. On the demand side, consumers demonstrate a marked ignorance of the probability that they will need LTC and who will pay for the care if it is needed. Federa and Oettinger (1991), citing work done for AARP by the Daniel Yankelovich Group (1990), report that of adults over age sixty-five, 33% still believe Medicare covers a significant portion of long-term care cost and only 6% thought they would

need to rely upon Medicaid for LTC services (Pepper Commission, 1989). Coupled with the high cost of LTC insurance there is little wonder that so few have made an investment in LTC coverage. Rubin and her colleagues estimate that a "significant minority" of the elderly can afford LTC insurance (Rubin, Wiener and Meiners, 1989). However, even this conclusion must be tempered. Wiener and Harris (1990) warn that:

> "...the debate over the affordability of private long-term care insurance has been flawed by a failure to specify what kind of policy people are assumed to be "'buying'".

Private insurance policies can be designed to fit any affordability criteria. The more restricted the benefits, the lower the premiums, the higher the affordability estimates will be. Conversely, the richer the benefits, the higher the premium, and the lower the affordability estimates will be. If affording private long-term care insurance means that people can buy a high quality policy that covers a fairly long period of care, maintains its purchasing power over time, covers home care as well as nursing home care, and does not depend on high percentages of insureds dropping their policy, then the percentage of the elderly who can afford private insurance is almost certainly less than many have previously estimated. Previous analyses were based on premiums that were much less expensive.

On the supply side, insurance premiums for LTC are affected by the same factors facing any insurance product: moral hazard, biased selection and the accuracy of actuarial predictions. In the LTC market the possible effects of these factors are much greater than in more traditional markets. In particular, actuarial predictions are susceptible to error given the limited experience insurers have with this population.

This brings us to a crucial point, LTC insurance is expensive. Van Gelder and Johnson, using data collected by the Health Insurance Association of America (HIAA) report average annual premiums for individual policies based on reports from 15 insurance firms that together account for over 75% of all LTC policies sold (two of the 15 did not report premium data). For a 'typical' plan, which provides $80 a day nursing home coverage (with a 20 day deductible) (with a 4 year maximum limit) and $40 a day home health care benefit (with a 20 day deductible), annual premiums with and without inflation adjusters were:

Table 3.2

Age	Premium without Inflation Protection	Premium with Inflation Protection
50	483	658
65	1,135	1,395
79	3,841	4,199

Source: Van Gelder and Johnson (1991)

Wiener and his colleagues (1990) (henceforth referred to as Brookings) report simulated premiums for the actuarial fair non-

forfeiture value of coverage similar to that reported by Van Gelder and Johnson (HIAA). These are compared in the following table.

Table 3.3

Age	Premium without Inflation Protection		Premium with Inflation Protection	
	Brookings	HIAA	Brookings	HIAA
50-65	431	483	616	658
65-69	1,195	1,135	2,105	1,395
75-79	2,605	3,841	3,874	4,199

Source: Van Gelder and Johnson (1991); Wiener, et al (1990)

The remarkable similarity of the actual premiums represented by the HIAA numbers and the idealized Brookings numbers is striking and suggests the current LTC market is not grossly over priced. One interpretation of the similarity of these findings is that the market for LTC insurance is working rather well and that the relatively high cost of LTC, in fact, is a direct reflection of the high cost of delivering chronic care benefits rather than high loading fees or the inability of insurers to accurately price their products.

Further evidence for this interpretation comes from the comparison of simulated versus actual group policy rates. Group policies are generally considered to be less expensive than individual policies because of the ability to control biased selection and lower loading fees. The following table compares data on premiums from the Brookings simulations with actual premiums for two of the most active vendors of LTC insurance (Weiner, et. al., 1990).

Table 3.4

Age	Brookings	Principal Group	Travelers
50-54	913	413	519
60-64	1,445	857	951
65-69	2,662	1,209	1,477
70-74	2,713	1,765	2,161
75-79	3,217	3,317	2,984
80-84	3,854	N/A	N/A

Source: Wiener, et al (1990)

While all the simulated premiums are generally less than those in the individual market, the actual (HIAA) premiums are quite similar to the simulated premiums, again suggesting that market prices reflect actuarial risk.

These results pose a very real dilemma for the S/HMOs. On the one hand the price of LTC insurance appears to be actuarial fair, or at least close to it; on the other hand consumer demand for LTC care continues to be extremely low.

The Chronic Care Benefit

The obvious question -- why anyone would want to join a S/HMO -- remains unanswered.

From the consumer's point of view the S/HMO looks remarkably like a TEFRA HMO. Members receive the entire range of Medicare mandated services delivered by any TEFRA HMO. In addition, S/HMO members often receive added benefits, such as drug and dental benefits. But these too are common benefits offered by TEFRA HMOs

to increase membership. Lastly, S/HMO members sometimes receive additional non-Medicare covered LTC services.

As originally conceived (Lutz et al., 1983,4,5?) the social aspect of the S/HMO (read as the chronic care benefit) was to serve as a drawing card in much the way that prescription drug and dental benefits serve TEFRA HMOs. However, head-to-head competition between S/HMOs and other Medicare HMOs revealed that consumers' true preferences were not, in general, for LTC services. That is, when given a choice, Medicare beneficiaries were likely to choose the Medicare HMO over the Social HMO.

At this juncture we must ask "would a S/HMO member be better off in a TEFRA HMO and buying LTC insurance privately?" Two components of the benefit need to be considered. The first is coverage and the second price. As already noted, long-term care coverage under the S/HMOs was effectively front-end coverage up to a limited amount, constrained further by monthly caps and even in some cases caps on expenditures within types of service.

Price of the Chronic Care Benefit

Price was a very real issue for consumers. For many members the chronic care benefit offered by he S/HMOs was attractively priced. Below are average premiums for various LTC options by age group.

Table 3.5

Mean Price of Commercial and S/HMO Insurance by Age Group

Age	Individual	Group	Hi-S/HMO	Lo-S/HMO
65-69	1,135	1,477	694	299
70-74	N/A	2,161	694	299
75-79	3,841	2,984	694	299
80-84	N/A	N/A	694	299

Source: Wiener, et al (1990)

The difficulty in making comparisons between these four alternatives is establishing the cost of the benefits. One option is to compare the price-to-benefit ratio of individual, group and S/HMO LTC insurance. We argue for calculating two extreme positions. Both assume the maximum outlay in an individual plan, that being 4 years of NH coverage at $80 per day at a cost of four times the yearly premium for the individual and group alternatives. For the S/HMO we again assume the most generous outlay for the high premium S/HMO -- $12,000 for one year's premium -- and the lowest premium S/HMO -- $7,500 for one year's premium. These ratios are given in the following table:

Table 3.6

Mean Price/Benefit Ratio of Commercial and S/HMO Insurance by Age Group

Age	Individual	Group	Hi-S/HMO	Lo-S/HMO
65-69	6.45	4.96	17.3	25.1
70-74	N/A	3.39	17.3	25.1
75-79	1.91	2.45	17.3	25.1
80-84	N/A	N/A	17.3	25.1

Clearly, the S/HMO benefit was a bargain for subscribers, returning as much as $17 or $25, in the hi and lo option S/HMOs, for every dollar paid in premiums.

One objection to our approach is that we assumed the entire premium went toward the chronic care benefit rather than being split between the LTC and the acute care benefit including the enriched "extended care" packages. However, TEFRA HMOs in the Minneapolis/ St. Paul market, which included Seniors Plus, did not charge premiums for its extended benefits until 1988 at which time Seniors Plus also increased their premium. Thus, if standard Medicare HMOs can offer comparable extended benefits at no cost and receive only 95% of the AAPCC, it is reasonable to assume, that aside form selection bias, that S/HMOs should also be able to provide these benefits at no additional cost.

Furthermore, there is no basis to assume any adverse biased selection; we have already seen that S/HMOs have healthier members than FFS and no significant bias when compared to TEFRA HMOs in the S/HMOs market area. Additional evidence supporting the assumption that extended acute care benefits can be paid for under the regular TEFRA AAPCC payment comes HCFA's October 1989 monthly report of Medicare prepaid health plans, which documents no less than 13 HMOs that offer a variety of extended services at no additional cost to the consumer.

As shown in the following table, 3 of the 4 S/HMOs paid out considerably less money for chronic care services than they took in through premiums.

Table 3.7

Ratio of Monthly Premiums to Monthly Chronic Care Payout

	1989 Monthly Premium	1989 Avg for Chronic Care Monthly Payout	Ratio
Elderplan	$29.89	$44.00	1.47
Seniors Plus	34.95	28.00	.80
Medicare Plus II	57.85	29.00	.50
SCAN	24.95	19.00	.76

Source: Harrington and Newcomer (1991)

Ordinarily, one would expect a payout of less money than was taken in, if only to cover management costs. This was apparently the case with three of the four S/HMOs.

If one includes the cost of case management in the estimate, as shown below, three of the four ratios are greater than 1.0, indicating that some form of cross-subsidization of the chronic care benefit was in effect.

Table 3.8

	1989 Monthly Premium	1989 Avg Monthly Payout (Chronic & Case Mgt)	Ratio
Elderplan	$29.89	$50.00	1.67
Seniors Plus	34.95	35.00	1.00
Medicare Plus II	57.85	36.00	.62
SCAN	24.95	30.00	1.20

Source: Harrington and Newcomer (1991)

In any case, the S/HMOs have underpriced their LTC premium, which should have made the benefit very attractive to members, who can expect a payout each year at least equal to their premium in three of the four S/HMOs.

However, since the S/HMOs are at risk of losing money on their long-term care benefit, the cost of the chronic care benefit must be augmented from other sources.

The most likely sources are the additional 5% of the AAPCC paid to S/HMOs and the adjusted AAPCC payment for nursing home eligible enrollees (2.1 x base). Taken together, these represent added payment for frail older enrollees of about 115% and an added payment of 5% for the rest.

Cost of Care in the S/HMOs

Control of Expenditures for Hospitalization in the S/HMO

The S/HMOs were not particularly successful in reducing the rate of hospitalizations or shortening LOS when compared to other Medicare HMOs. A comparison of inpatient utilization shows that S/HMOs operate at, or about, the same level as Medicare HMOs (Hodges, Camerlo and Gold, 1990). The following table compares discharges per 100 enrollees and average LOS for both S/HMO and Medicare HMOs.

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Table 3.9

	Medicare HMOs	Elderplan	Medicare Plus II	SCAN	Seniors Plus
Admissions per 1,000		245	308	308	207
Discharges per 1,000	267				
Average LOS	7.4	9.3	5.8	6.8	10.0

Source: Hodges, Camerlo and Gold (1990); Harrington & Newcomer (1991)

Those plans that had higher than average admissions (Medicare Plus and SCAN) also had lower than average LOS suggesting that monitoring of inpatient stays was being done. However if we compare each S/HMO with data from HMOs in its own geographic region we see a somewhat different picture.

Table 3.10

	NE	Elderplan	Pac	Medicare Plus II	Pac	SCAN	Midwest	Seniors Plus
Admissions per 1000	279		246		246		267	
Admissions per 1000		245		308		308		207
Avg LOS	8.7	9.3	6.4	5.8	6.4	6.8	7.4	10.0

Source: Hodges, Camerlo and Gold (1990)

The table below gives the percentage difference between the rate of admissions and LOS for each S/HMO compared to its regional average. (A negative number is decrease in admissions or days relative to the regional average.)

Table 3.11

	Elderplan	Medicare Plus II	SCAN	Seniors Plus
Admissions per 1000	-14%	25%	25%	-22%
Average LOS	7%	-9%	6%	35%

After correcting for regional differences two S/HMOs kept admissions below average (Elderplan & Seniors Plus). However, only one S/HMO kept length of stay below its regional average (Medicare Plus II). While we can not 'net out' the effect of higher admission and lower length of stay, or vice-verse, we note no clear pattern either within the traditional HMOs (Medicare Plus and Seniors Plus) or LTC providers, nor between the traditional HMO S/HMOs and the LTC S/HMOs. Certainly there is no indication of a single (or at least sizable) S/HMO effect that permeated the four S/HMO plans. While some savings in total hospitalizations may have been made by the S/HMOs, the differences do not seem substantively different from those of standard Medicare HMOs. Again, at best, the S/HMOs only partially meet their goal of reducing the total cost of hospitalization. We find it unlikely that any major cross-subsidization of the chronic care benefit came from control of hospital admissions or length of stay.

Cross-subsidization in the S/HMOs

To determine the source of cross-subsidization we must understand how the dollars in S/HMOs were actually spent. To

eliminate start up cost and the early financial experience of the S/HMOs, we examine data from 1989.

The first task is to estimate the expected income from a S/HMO member. This is the sum of the AAPCC payments, premium payments paid by the members and additional payments to the standard AAPCC rate (NHE rate). S/HMOs received 95% of the adjusted AAPCC for 'standard' HMO care and an additional 5% of the adjusted AAPCC for the Social component in the Social HMO (TEFRA HMOs receive 95% of the AAPCC to deliver all Medicare mandated services). The AAPCC rate covers both Part A and Part B benefits. We present both payments separately. In addition to the AAPCC payments, each of the S/HMOs also charged an additional premium to their members. Annual premiums were: $359 at Elderplan; $694 at Medicare Plus II; $504 / $299 for the high or low option at SCAN and $419 at Seniors Plus.

Revenue sources and dollars per member per month, from HCFA AAPCC tables for 1989, for each plan are shown below:

Table 3.12

S/HMO	Part A AAPCC	Part B AAPCC	Premium
Elderplan	214.46	143.73	29.89
Medicare Plus II	186.52	99.92	57.85
SCAN Health Plan	189.03	183.41	42.00
Seniors Plus	189.56	95.40	34.95

Source: HCFA (1989)

An important component of the S/HMO's revenue comes from the additional Medicare payment for anyone who could be certified as

being nursing home eligible. For each of those so certified the S/HMOs received approximately 2.085% of the AAPCC.

The following table shows the total enrollment and number of members certified as nursing home eligible by each of the plans and the number actually receiving any chronic care (Newcomer and Harrington, 1991).

Table 3.13

	1989 Enrollment	Number NH Cert.
Elderplan	5,082	274
Medicare Plus II	5,412	617
SCAN Health Plan	2,824	223
Seniors Plus	3,256	277

Source: Harrington and Newcomer (1991)

Using the last two tables and assuming an institutional rate of 2.085 times the AAPCC for those certified as nursing home eligible, the average weighted revenue per member per month for each S/HMO yields the following.

Table 3.14

S/HMO	AAPCC	Premium	Total Revenue PMPM	Expenditures	Net
Elderplan	379.14	29.89	439.30	403.48	35.83
Medicare Plus II	309.76	58.85	367.61	357.08	10.53
SCAN Health Plan	404.35	42.00	446.35	404.25	42.10
Seniors Plus	311.27	34.95	346.22	331.40	14.82

Looking only at the cost of Medicare covered services, as reported by Harrington and Newcomer (1991), we see that in all cases the AAPCC payment more than covered the costs.

The next table demonstrates that a payment of 95% of the adjusted AAPCC, without the institutional cell being applied to those NHE (nursing home eligible), would have covered all the cost of Medicare services provided by all but one of the S/HMO's.

Table 3.15

S/HMO	AAPCC	Medicare Services	% of AAPCC
Elderplan	358.19	248	69
Medicare Plus II	286.44	290	101
SCAN Health Plan	372.44	247	66
Seniors Plus	284.97	250	88

Source: Adapted from Harrington and Newcomer (1991)

Adding administrative costs changes the figures to:

Table 3.16

S/HMO	AAPCC	Medicare + Adm	% of AAPCC
Elderplan	358.19	290	81
Medicare Plus II	286.44	295	103
SCAN Health Plan	372.44	335	90
Seniors Plus	284.97	270	95

Source: Adapted from Harrington and Newcomer (1991)

Further insight into the S/HMOs comes from separating the estimates of revenue, expenditures and net profit for the NHE members and the non-NHE members.

Table 3.17

	Revenue		Expenditures		Net Profit	
S/HMO	NHE	~NHE	NHE	~NHE	NHE	~NHE
Elderplan	692.54	388.08	1,217.67	218.40	-525.13	106.68
Medicare Plus II	630.77	321.40	639.65	322.12	-8.88	-.72
SCAN Health Plan	746.86	430.29	697.21	309.70	49.65	120.59
Seniors Plus	566.39	309.92	673.02	263.26	-106.63	46.66

While the S/HMOs tended to show overall profits, they generally lost money on the NHE population. The calculations in the above table are based on very conservative assumptions. In particular, we adjusted the NHE AAPCC payment so that the estimates of net expenditures per member per month equalled the

expenditures reported by the S/HMOs in Newcomer and Harrington. This entailed changing the NHE cell adjuster from 2.085 (a figure we based on the overall age and gender distribution in all the S/HMOs) to 1.85 for Medicare Plus II to 2.01 for SCAN. These adjustments likely underestimate the actual NHE adjusters but their modification was necessary because the actual expenditures reported by the S/HMOs were not based on audited records.

These calculations suggests that, under the present organization of health care delivery in the S/HMOs, the added revenue from using 100% of the AAPCC and the rate adjustment charged for the AAPCC for NHE enrollees comes close to offsetting the total cost of care for all enrollees.

Thus, the question of what happens if the proportion of NHE enrollees increases, either from open enrollment or from the current enrollees age in place, is especially interesting. Projected net profit as a function of the percent NHE membership for each of the current S/HMOs is shown in the following table.

Table 3.18

Net Profit Per Member Per Month

	Percent of Members Nursing Home Certified		
S/HMO	10%	20%	30%
Elderplan	43.50	-19.68	-82.86
Medicare Plus II	-1.54	-2.36	-3.17
SCAN Health Plan	113.49	106.40	99.30
Seniors Plus	31.33	16.00	.67

Although each of the current S/HMOs fared very differently under the current arrangement of about 10% NHE enrollees, the results of increasing that proportion adversely affects all the S/HMOs. With increasing numbers of NHE members all plans suffer losses in profits. Without proportionate increases in the number of non-NHE members, the cost of care in S/HMOS will rise drastically as the current population of S/HMO enrollees ages.

One important caveat must be borne in mind: These figures assume the structure of the current S/HMOs: their idiosyncratic cost, delivery system and organization, as well as the chronic care benefit package and premium pricing (all of which are candidates for change in the second generation of S/HMOs).

CHAPTER IV: DEMONSTRATION DESIGN: PARTICIPATION ISSUES

OBRA 1991 mandates that HCFA establish up to 4 additional S/HMOs. These S/HMOs will differ from the 1st generation in that they will not have the advantage of HCFA risk-sharing in their start-up years. It is expected that the same waivers will be available to S/HMOs to permit high AAPCC payments, nursing home cell-rates, and queuing, if these are deemed desirable features of the demonstration.

Before developing additional S/HMOs, HCFA must determine what additional useful information can be gathered from an S/HMO-like demonstration, given the experience of the 1st generation S/HMOs and the current context of health and LTC delivery.

Among the decisions that must be reached are the following:

1. What are the goals of the new S/HMOs and what intervention is to be tested? Arguably, it is unnecessary to test capitation or insurance principles per se.

2. How, if at all, will the target population for S/HMOs differ from the 1st generation?

3. How, if at all, will the benefit structure differ from the 1st generation?

4. If HCFA decides that the 2nd generation S/HMO should be a test of the feasibility of more determined efforts to integrate LTC and acute care, it still must be decided how prescriptive HCFA should be about the ways of effecting such mergers. This requires determining whether the state of the art warrants such prescriptiveness, and whether better results will likely occur if HCFA allows bidders to exercise their own ingenuity in that regard.

5. Whether and how to develop a fairer pricing system for S/HMOs vis-a-vis other Medicare HMOs while still making participation desirable for potential sponsors.

Changing Context

Each 1st generation S/HMO needed to be examined in the context of what was available in fee-for-service medicine, TEFRA HMOs, and Medicaid and Medicaid waiver coverage within its own market area. The entire 2nd generation S/HMO demonstration should be considered against the backdrop of the changed climate since the early 1980s when the 1st S/HMOs were organized. From that perspective, HCFA needs to consider what, of lasting utility, can be gained from a further S/HMO demonstration.

Since the S/HMOs were initiated the following changes have occurred:

(1) the implementation of Medicare prospective payment for hospitals, which reduces any previous incentives to overuse hospital care for Medicare beneficiaries, but increases the likelihood of using Medicare post-acute care;

(2) dramatic expansion of community care and case management under Medicaid waivers, and better understanding of the advantages of flexible community chronic care benefits;

(3) the initiation of the PACE demonstration to replicate the On Lok project, which demonstrates the utility of combining capitated acute care and LTC for Medicaid recipients who need LTC at the point of enrollment;

(4) growing availability of LTC insurance products;

(5) growing understanding that LTC may need to be arranged in residential settings for economies of scale, and experimentation with care in group settings other than nursing homes (adult foster care, assisted living);

(6) The expansion of TEFRA HMOs and Medicaid capitated care, which developed simultaneously with S/HMOs. This serves to blunt the distinctions between S/HMOs and enriched TEFRA HMOs. It also gives rise to the question of why HMOs have not, themselves, chosen to market LTC products as part of their enriched package;

(7) Growing evidence that approaches from geriatric medicine can result in better outcomes for older people;

(8) Some recognition that TEFRA HMOs have not been in the forefront of innovations or state-of-the art practice in geriatrics;

(9) A growing disenchantment and withdrawal from Medicare risk contracts by HMOs, with a strong belief (whether true or not) that they are unprofitable.

There is also considerable belief that the political climate is ripe for some real reform in health care financing in the United States. Within a decade or so, some sort of universal insurance may be available for acute care for persons of all ages. Less likely, but also feasible, would be some sort of universal LTC insurance for persons of all ages. HCFA may want to consider developing the kind of 2nd generation S/HMO demonstration that will provide it with information that would still have utility if financing for acute care changed. Based on experience in Canadian provinces, it is reasonable to say that even when financial barriers for access to acute and LTC are removed, the articulation between acute care and LTC remains imperfect, to the disadvantage of the older patient and perhaps to the disadvantage of the taxpayer as well.

Bearing in mind the above points, HCFA may decide to use the 2nd generation S/HMOs to examine in more depth the potential effectiveness of geriatric medicine approaches and more intense integration between acute care and LTC. Such lessons could be applied even to a national system of health insurance for people of all ages.

In the remainder of this chapter, we explore the likelihood of HMO participation, given current attitudes toward Medicare risk contracts, the likelihood of other sponsorships, and the value of the chronic care benefit for potential consumers.

Prospects for HMO Participation in a Phase II S/HMO Demonstration

A critical issue for the success of the demonstration is whether HMOs will choose to participate. The intent is for the demonstration to involve up to 4 HMOs. In general, we are pessimistic that this number of financially-stable HMOs will volunteer for the demonstration, without substantial changes in the demonstration design from phase I. Even with a design that contains financial inducements for HMOs, it is not clear that a sufficient number of HMOs will participate. We base this pessimistic assessment on three considerations: 1) the limited number of potential participants; 2) the published research results pertaining to the phase-I demonstration; and 3) the existing concerns of HMOs with TEFRA risk contracts.

Number of Potential Participants

In December, 1990 (the most recent data available) there were 96 TEFRA risk HMOs, enrolling 1.264 million Medicare beneficiaries. If we assume that only contractors demonstrating a significant commitment to their risk contract would be interested in participating in the demonstration, and we arbitrarily adopt 5000 Medicare risk contract enrollees as our "commitment threshold", then there are 49 existing contractors that realistically might participate. Eliminating the two HMOs that

participated in phase I reduces this number to 47. Of these 47, 12 are located in HCFA Region 9 (California, Nevada, Arizona, Hawaii), with 8 of these located in Southern California. Six are located in Region 4 (Atlanta), all in southern Florida.

If one further assumes that the primary reason for an HMO to participate in the S/HMO phase II demonstration is to gain a competitive advantage over other Medicare risk contractors in its market area, then it seems likely that participants will be drawn from only a limited number of communities. Areas containing more than one of the 47 contractors include: Boston (3), Rochester, NY (2), south Florida (6), Minneapolis-St. Paul (4), San Antonio (2), Denver (2), Phoenix (2), southern California (8), Portland (2), and Seattle (2). Eliminating communities with phase I HMO demonstration participants (Portland and Minneapolis-St. Paul) leaves 27 HMOs as potential participants in phase II.

Obviously the assumptions used to reach this number are arbitrary and hence highly debatable. However, any process of identifying possible participants, no matter how it is carried out, will lead to the same conclusion: while focusing phase II on TEFRA risk contractors may simplify implementation, it also severely restricts the number of probable participants. That is, the "pool" of likely participants is simply not very large. Therefore, even a demonstration with features attractive to HMOs is not likely to generate any substantial number of organizations wiling to participate.

Published Research Results

As we noted in the discussion above, the willingness of TEFRA risk HMOs to participate in phase II is likely to depend on factors such as the competitive environment in which they operate. It will also be influenced by their perceptions of the experience of the two HMOs participating in phase I. This experience has been summarized by Newcomer, Harrington, and Friedlob (1990), and their summary raises several salient issues for potential phase II participants.

First and foremost, participation in the S/HMO demonstration caused initial financial losses for both HMOs, despite the fact that they were allowed to "screen out" some bad health risks in order to achieve a representative mix of enrollees by health status. These losses were attributed to relatively high administrative and marketing costs, combined with slower than anticipated enrollment build-up. The federal government subsidized the majority of these losses through risk sharing arrangements. In fact, the authors suggest that this risk sharing may have magnified losses, on the grounds that since the "stop loss" level was attained relatively early in the demonstration year, the HMOs had little incentive to contain their costs thereafter. However, this does not seem consistent with the explanation that enrollment growth was slower than expected because the HMOs may have spent "too little" on marketing. Interestingly, the losses do not seem to be related to excessive

expenditures on chronic services or an inability to constrain hospital utilization of enrollees.

Whatever the reason for the losses incurred by the HMOs in phase I, these losses have been widely publicized in the HMO industry. They have created an environment in which HMOs are likely to be extremely cautious about committing to participation in a phase II demonstration. This caution will be heightened by the decision of the federal government not to offer risk sharing arrangements similar to those in place during phase I.

The slow enrollment growth in phase I raises another "red flag" for potential HMO participants. Some HMOs might be willing to accept the financial risk of participation, which could be substantial given the experience of the HMOs in phase I, if they thought that there was the possibility of a large reward in terms of attracting substantial numbers of new members. In fact, the phase I data suggest that this is not the case. After three years, one phase I participant had attracted 4,974 enrollees to its S/HMO plan, but about half had transferred from another Medicare plan it offered. The second HMO had 2,574 enrollees in its S/HMO plan. In return for three years of effort, and after incurring substantial financial losses, these experienced and financially secure HMOs had been able to attract a maximum of about 2,500 new members each as a result of participating in the demonstration. It would be an understatement to suggest that the phase II demonstration is not likely to be regarded as an

exciting new market opportunity for very many existing TEFRA risk contractors.

The UCSF researchers suggest that the reason for the low enrollments was that the price of the S/HMO product exceeded that of other competitive high option TEFRA risk products, while consumers were not able to clearly understand the additional benefits that they would receive in return for a higher price. A slightly different interpretation is that the S/HMO product does not differ significantly, from the consumer's viewpoint, from products that HMOs can offer under expanded benefit options that have been approved by HCFA in the past. (Expand on this in next version). This problem is likely to persist in the phase II demonstration as well.

Concerns of HMOs About TEFRA Risk Contracting

As part of a recent HCFA project, we conducted in-depth interviews with 6 HMOs at different locations across the United States concerning their experience in contracting to provide services to Medicare beneficiaries (Christianson and Dowd, 1991). All of these HMOs are relatively large, well-established plans that might be viewed as logical candidates to participate in a phase II S/HMO demonstration. One participated in the phase I demonstration. Most of the HMOs we interviewed suggested that they were in the process of reassessing their commitment to continued enrollment growth in their TEFRA risk product. Typically, they were restricting their open enrollment periods.

(Since these interviews, we have learned that one of the HMOs terminated its TEFRA risk contract.)

The HMOs we interviewed expressed little enthusiasm for expanding their existing contractual relationships with Medicare, whether through current or new products. The HMOs saw their contracts as either unprofitable, or marginally profitable, for the most part. In addition, they expressed dissatisfaction with the quality assurance process now required by HCFA for contracting HMOs. This process, administered by the PROs, was viewed as ineffective, costly, and largely unnecessary.

The manner in which quality assurance may be carried out under a phase II demonstration would be a concern for potential participants. Also, and probably more importantly, their financial experience under existing contracts reinforces the impression created by losses incurred by HMO participants in the phase I demonstration. In summary, dissatisfaction with present TEFRA risk contracting arrangements would appear to be a major obstacle to HMO participation in a phase II S/HMO demonstration.

One qualification to this statement is required. HMOs in the southwest (including southern California) and in Florida appear less dissatisfied with existing HMO Medicare contracts, from a financial perspective. It may be possible to draw participants for a phase II demonstration from these areas.

In conclusion, we think it is unlikely, given the current furor over TEFRA contracts, the anxious state of HMOs with respect to adverse selection and their perception of HCFA's

inability to properly compute "risk adjusted" premiums, that more than a handful of organizations will be willing to participate in a large and complex demonstration.

Prospects for Medicare Insured Groups (MIGs) as S/HMOs

An alternative S/HMO sponsor that has received little attention is the Medicare Insured Group (MIG). Like the S/HMO, MIGs are an alternative to standard fee-for-service Medicare. Unlike the S/HMOs they provide, directly and indirectly, strong incentives for participation of both employers and employees/retirees.

The MIG is an alternative to TEFRA HMOs and CMPs. It provides a structure in which private employers, who are responsible for the health care benefits of both current employees and retirees, can enter into a capitated arrangement with HCFA. The goal of the MIG is to lower overall cost to both the employer and to the government. From the government side this is done by paying a capitated payment for all Medicare eligible employees/retirees in the employer's benefit pool. From the employer's side the promise of less administrative burden for employees, a point which seems especially salient to the unions, and the ability to benefit from the savings accrued from managed care are enticing. Though MIGs have had a rather shaky start, due mostly to vacillation among the various partners (the employers, the unions and HCFA), there seems to be a renewed interest in the concept.

Using MIGs as a vehicle for the S/HMO demonstration has several advantages. First, MIGs, like S/HMOs, rest upon a foundation of managed care. Second, because of the potential savings to the employer, up to 5% of the AAPCC payment, the employer incentive will be to enroll most, if not all, eligible members into the plan. Employers, under most scenarios, will offer retired workers the full range of benefits offered to active employees in exchange for participation in the MIG thus limiting the fear of biased selection expressed by current HMOs. Lastly, and perhaps most important from the view of the S/HMO demonstration, the MIG will be payed an experience-based payment for the first six years of operation. This means that, for the life of the S/HMO demonstration, the capitation payments will most likely be higher than the 100% AAPCC payment currently payed to the S/HMOs. Thus the 'experienced based' cost of the social components of the S/HMO could be factored into the AAPCC payment made to the MIG. While the dual role of the MIG may cause some difficulties in evaluating the MIG (in particular separating the 'typical' MIG Medicare services from the additional services) it does not affect the evaluation of the S/HMO. In fact, the use of MIGs as a S/HMO sponsor overcomes many of the faults identified by HMOs and might well contribute to overall reduced cost for the MIG through more effective delivery of care to the retired population.

V: DESIGN OF 2ND GENERATION S/HMO: THE DELIVERY SYSTEM

Incorporating Advances in Geriatric Care into the S/HMOs

The second round of S/HMO demonstrations provides a needed opportunity to focus on better ways to deliver care to older persons. The original S/HMOs, by design, used a stratified sampling approach to approximate (at least on enrollment) the elderly population. Only a small proportion of the enrollees were in any immediate risk of needing long-term care. To the extent that any special geriatrics care was offered, it tended to be directed towards this small group. More often, the care provided was not different from that offered in other Medicare HMOs, which have not demonstrated any strong commitment to providing geriatric care.

Geriatric care can be extended to a larger pool of at-risk persons with the intention of avoiding complications or detecting problems early. Such a strategy, however, can be efficient only when viewed over a longer time horizon. Because it involves a front-end investment in extra attention to detect and treat the problems uncovered, it costs more initially. The proof of the value of this investment lies in its ability to reduce subsequent service use. Geriatric care can also play a crucial role at times of acute crisis. For example, hospital stays might be shortened by more intensive attention to functional and management problems early in the hospital stay. Discharge planing can be both improved and expedited by such an approach.

Although some of the S/HMOs did hire geriatricians, there are no examples where geriatrics was actually woven into the major stream of primary care provided. More often, it was an add on, where the plan of care for clients deemed to be at risk was reviewed and critiqued but no action was taken to make meaningful change. The heart of geriatric activity was usually case management, which seemed to have two purposes: 1) to minimize the exposure of the S/HMO for long-term care liabilities and 2) to reclassify clients as nursing home eligible and hence entitled to a much higher AAPCC rate.

The On Lok model (now being reproduced in PACE projects) represents a greater departure from ordinary care, but it is a very rigid approach, based in adult day health care. Several of the PACE projects do use geriatricians for primary care delivery and do emphasize attention to functional problems and avoiding institutionalization, but they do so within a most atypical practice environment.

Components of Geriatric Care

The second generation of the S/HMOs could complement this effort by testing the effects of organized geriatric care in more available settings. They offer an opportunity to test a model that more actively attends to the needs of older enrollees by emphasizing a geriatrics approach to care. Two reports have pointed to the potential for HMOs to provide better care for older persons. (Siu, Brook and Rubenstein, 1986; Gillick, 1987). To summarize, HMOs (and S/HMOs) offer a vehicle that can:

- improve quality of care by investing in activities that will better coordinate services and detect problems earlier

- assure continuity of care to follow multiple, simultaneous chronic problems and deal with the summative results on patient functioning

- provide specialized geriatric assessment for those patients in whom careful assessment and management is needed to both address specific clinical conditions and the overall effects on functioning

- improve the care of the "subtly sick" (those with atypical presentations of disease) and the "noncomplianing sick" (older persons have been shown to fail to report many symptoms that may be clinically significant)

- provide case management services that link medical and social interventions

- encourage active physician review of hospitalizations that present special risks to older patients

- use geriatric consultants to advise specialists and primary care physicians in the management of complex cases, especially in avoiding excessive bed rest and polypharmacy

- develop a range of home care services to provide both nursing and homemaking to reduce the need for institutionalization

- use effective and efficient modes of rehabilitation to restore and maintain function

The Council on Scientific Affairs of the American Medical Association issued a White Paper on elderly health in 1990 that outlines a number of areas for special attention (AMA, 1990). Within the paper they list syndromes that deserve special attention in older persons including the following:

- falling
- instability
- functional impairment
- deconditioning
- incontinence

- delirium
- constipation
- fecal impaction
- dehydration
- nutritional deprivation
- sleep disorders
- sexual dysfunction
- family stress
- adult abuse

Among the suggestions for ways to organize services to be able to respond effectively to such problems are the use of uniform protocols to assure adequate information is collected and the judicious application of comprehensive geriatric assessment. Other areas for special attention to the needs of older patients noted were decreased functional capacity, preventive gerontology, mental health and medications, especially polypharmacy.

The geriatric approach incorporates both acute and chronic care attention. It emphasizes anticipatory care, by which is meant attention to areas of potential complication in an effort to minimize or eliminate their consequences. The following represent examples of the types of activities encompassed in a geriatrics approach:

- drug monitoring to avoid polypharmacy and attend to potential complications of therapy
- improved decision-making at times of crisis (eg, surgery and hospital discharge)
  - --better information about the benefits and potential adverse consequences of alternative therapies
  - --make complete exploration of the outcomes the client wants to maximize
- greater use of alternative facilities in place of hospital care

--earlier use of transitional care with meaningful rehabilitation after hospitalization

--more aggressive primary care in nursing homes to manage problems that might otherwise be sent to hospital

- greater use of alternative facilities in place of nursing homes

--innovative combinations of housing and home care

--home visits by physician extenders to provide primary care on site

- more attention to making critical decisions about care choices

--better discharge planning, including identification of alternative modes of care and choices of specific providers within these modes

--careful consideration of what aspects of care and outcomes the patients and their families want to maximize

--permitting patients and their families to knowledgeably trade off aspects of care (e.g., safety for autonomy)

- more attention to making end of life decisions

--more complete exploration of advance directives and their implications

--supportive environments to patients not choosing intensive care

--counselling and support for families

- protocols for better evaluating and managing common geriatric conditions (eg falls, incontinence, confusion)

- standardized assessment protocols to screen for persons at risk of complications or at risk on the basis of inadequate social supports

- leadership by geriatrician and geriatric nurse practitioners (GNPs)

--more than token oversight of care by geriatrician

--active clinical roles for GNPs in primary care

--active coordination of primary care for each geriatric patient to avoid excessive and inappropriate specialty care

--adequate contact time and telephone access (to GNPs) to provide continuity, reassurance and information to maximize compliance and detect problems early

Related Experience of TEFRA HMOs

The original S/HMOs shared many of traits of the TEFRA HMOs. An ongoing national study of TEFRA HMO medical directors being conducted by the University of Minnesota School of Public Health suggests that very few of these HMOs changed their style of care in response to taking on a Medicare population. The preliminary analysis of the data thus far indicates that:

- less than 30% of the medical directors were aware of any trained geriatrician on their staffs or in their programs
- 35% had physicians who had passed the examination of added competence in geriatrics
- 40% knew of at least one physician in the program who claimed some expertise in geriatrics
- the mean number of geriatrician per 1000 TEFRA HMO enrollees ranges from .06 (where geriatrician is defined as someone who is trained in geriatrics) to .20 (using passing the special examination); most are part-time
- 20% claimed that geriatrician were actively used
- 47% reported that although support for geriatricians was expressed, little use was made or they were simply tolerated
- 43% reported that physicians referred cases to a geriatrician
- 12% stated outright that geriatricians were unnecessary
- 43% reported a mechanism to refer patients to a geriatric assessment team

- the assessments were used for:

  --nursing home patients 25%
  --ambulatory patients 23%
  --home care patients 20%
  --hospital patients 17%

- 55% of the HMOs used some form of general health questionnaire to collect information on their elderly patients

- 75% of these collected the information only on enrollment in the HMO

- 16% collected this information annually or more often

- 67% reported that the physician reviewed the data prior to the patient's initial visit

- 73% indicated that the forms were retained in the patient's record

- 33% of the HMOs used formal protocols for at least some of the geriatric problems identified by the AMA Council on Scientific Affairs

  --the most frequent protocol topic was polypharmacy 28%

  --staff model HMOs were more likely to use protocols than IPAs

- 15% of the HMOs used a special form for comprehensive geriatric assessments

Fox and his colleagues (1991) looked at some of what were believed to be the most progressive HMOs serving older persons to identify innovations. Table 4.1 summarizes what they found on the basis of questionnaires and site visits. Even among the proposed vanguard programs, the level of innovation, especially in direct service, was modest.

TABLE 4.1

Innovative Initiatives In Service Delivery For The Elderly In Selected HMOs

Fallon Community Health Plan, Worchester, MA

- Telephone interview of new enrollees regarding difficult issues
- A screen to identify patients likely to benefit from comprehensive geriatric assessment
- A limited number of physicians are each assigned patients in a small number of nursing homes
- A geriatric nurse practitioner provides primary care in three nursing homes
- Specialist primary care nursing programs for chronically ill outpatients

FHP, Los Angeles, CA

- Five senior health centers that exclusively serve the elderly
- Discharge planners screen all hospital patients within 24 hours of admission
- Mailed, self-report questionnaire for all enrollees followed up by a telephone interview of those who do not respond
- A screen designed to identify high risk patients in need of early intervention

Group Health, Minneapolis, MN

- Geriatrician
- A self-report questionnaire to identify patients with ADL and cognitive impairment
- Geriatric nurse practitioners for nursing home patients
- A nurse practitioner and an enterostomal therapist for decubiti detection and therapy for nursing home patients

- Volunteers:
  - Visit elderly in their homes
  - Monitor frail patients by phone

Group Health Cooperative, Seattle, WA

- Computerized medication profile of each patient
- Special review of medical charts of patients who take identified high risk drugs
- Screening and support groups for depression

Medcenters Health Plan, Minneapolis, MN

- Computerized medication profile of each patient
- Geriatric assessment and case management
- Senior health history" self-report questionnaire for all new enrollees

Kaiser Permanente, Portland, OR

- Computerized medication profile of each patient
- Nurse practitioners visit nursing home patients
- A physician other than the patient's primary care physician usually follows the patient in the nursing home

Kaiser Permanente, Los Angeles, CA

- Physician Regional Coordinator for Elderly Health Care
- Multidisciplinary "geriatric interest group" in each medical center
- Newsletters and other printed materials on caring for the elderly regularly distributed to medical staff
- Computerized medication profile of each patient
- Pilot programs utilizing pharmacists:
  - Hospital discharge medication counseling
  - Outpatient assessment team
  - Multidisciplinary team that discusses hospitalized elderly patients with complex needs

- Hospitalized patients meeting high risk criteria are randomized into comprehensive geriatric assessment with follow-up or usual care
- Geriatric consultation team that can change medication orders and initiate therapy
- Physician assistants and geriatric nurse practitioners, each of whom are assigned 60-90 nursing home patients

Some of the reluctance of the TEFRA HMOs to commit to a heavy investment in specific geriatric care can be justified by the lack of hard evidence about the efficacy and cost-effectiveness of geriatric care. Although a geriatric approach is intuitively attractive, there is not yet a wealth of empirical data establishing its value. Geriatrics has been practiced and evaluated in hospitals, in nursing homes, in home care, and in two relatively new models of care: day hospitals and geriatric evaluation and management (GEM) units.

Geriatric Evaluation and Management Units

The most extensively studied system of geriatric care has been geriatric evaluation and management. Initially, this intervention, labeled comprehensive geriatric assessment (CGA), focused solely on the assessment of elders' problems. Early studies showed, however, that in order to be effective, assessment must be linked to remedial actions (Solomon, 1988). Reflecting this insight, more recent experimental programs have combined the management of health care with comprehensive assessment. Renamed accordingly, geriatric evaluation and management (GEM) is an approach to preserving the health of frail elderly people that includes:

1. Evaluation of the person's physical, psychological, cognitive, social, functional, nutritional, financial and environmental status and the adequacy of the assistance available for meeting his or her needs.

2. Creation of a comprehensive plan for addressing the elderly person's most threatening problems.

3. Health care from a collaborative team consisting of a physician, a nurse and a social worker. Other providers of health care, including pharmacists, occupational therapists, physical therapists, psychologists and nutritionists, may also be involved either as members of the team or as consultants.

Beyond these few common elements, there is still great heterogeneity among GEM programs. They differ in their goals, their locations (hospital, outpatient clinic, home), the composition and function of their teams, the intensity of their interventions (from simply recommending actions to assuming all responsibility for care), and the degree of frailty of the elders that they serve.

Not surprisingly, the reported results of GEM have been as varied as the programs have been diverse. In general, most studies have been positive; of the 13 randomized clinical trials of GEM (see Table 2), all but one (Allen, 1986) demonstrated at least one desirable outcome. Decreased use of hospitals and nursing homes, increased use of home services, decreased cost of care, prolonged survival, improved quality of life (as reflected by functional ability, cognition or affect), and improved diagnostic accuracy have each been reported by several investigators. Only one statistically significant negative outcome has been reported by one GEM program (Teasdale, 1983); in

a non-randomized study of GEM provided un-selectively to all inpatients over the age of 74 years, the average initial length of stay in the hospital was longer for the group admitted to the GEM unit than for a similar group admitted to a general medical unit. No information was reported about the subjects' use of hospital services beyond their initial admission.

Although families' and friends' provision of care to frail elders is widespread and has been known to have important psychological, physical, and economic effects on the caregivers (Pruchno, 1989; Scharlach, 1989), the effects of GEM on such care givers have not been well studied. Several instruments have been created for measuring the various effects of caregiving on the informal caregivers, but most either are narrow in scope (Radloff, 1977), are very lengthy (Lawton, 1991), or their reliability and validity have not been determined (Montgomery, 1985).

The research published to date supports three common-sense notions: 1) GEM is most effective when provided to people who are most likely to benefit from it. 2) Enacting therapeutic plans is more effective than simply recommending them. 3) Sustained treatment is more effective than a single consultation (Applegate, 1991).

Unfortunately the available evidence does not support firm conclusions about the specific sets of circumstances in which GEM is consistently effective or about the components of GEM that are necessary for the intervention to be effective. In most

individual trials, some outcomes have been shown to be improved by GEM, but others have not. When the results of trials are compared, outcomes that were improved by some GEM programs were not improved by others, but no two trials of GEMs have been similar enough to allow truly meaningful comparisons of their results. Most trials have enrolled small numbers of subjects and have measured different outcomes.

The critical task is determining which types of GEM work best for which types of elderly people. A GEM program's location, intensity, duration and degree of intervention should be tailored to fit the nature and severity of its patients' problems. Low intensity home-based or outpatient, clinic based programs, may be well suited to moderately frail elders. High-intensity inpatient programs may be more appropriate for elders with more complicated problems. Each type of program must be tested on the appropriate group of older patients. Ultimately, a spectrum of program types may evolve, each providing GEM services to a stratum of elders afflicted with a different degree of frailty and co-morbidity. A practical method for screening and stratifying elderly populations according to level of frailty will be essential to all future trials of GEM.

National consensus development conferences in 1987 (NIH, 1988) and 1989 (Feussner, 1991; Kramer, 1991) recommended that high priority should be given to conducting single-site, controlled studies of outpatient GEM. They based their recommendation on the observation that outpatient GEM has been

effective in some settings and could be accessible to many frail elders at relatively low cost. One small outpatient GEM program reduced the health care costs of its frail elderly patients by 25 percent (Williams, 1987). Another reduced hospital bed days by 29 percent (Tulloch, 1979).

Research on the effectiveness of some of the early GEM programs has been clouded, and positive effects of GEM diminished, by four problems: over-broad criteria for deciding which frail subjects to treat (i.e., inadequate targeting), difficulty in recruiting subjects, small sample size, and reliance on other providers to act on the GEM programs' recommendations (i.e., provision of low "intensity of services"). Although outpatient GEM appears intuitively to be a relatively inexpensive, potentially cost-effective intervention, its true cost-effectiveness remains to be established.

Three important challenges will face future outpatient GEM programs.

1. Systematic and accurate identification of elders who are frail but mobile enough to participate in outpatient care. Analysis of the relationship between the subjects' pre-treatment level of frailty and their posttreatment outcomes is needed to better define the levels of frailty for which the GEM treatment is most effective (Winograd, 1991, Rubenstein 1991).

2. Effective collaboration with the subjects' established primary physicians. The GEM program must be sure that its recommendations are actually put into action, without threatening subjects' relationships with their established primary physicians.

3. Specification and measurement of a wide range of outcome variables, including indicators of quality

of life, use of health services, costs of care, and the burden of caregiving on elders' family and friends (Hedrick, 1991; Jahnigen, 1991).

Inpatient Geriatrics Practiced by Individual Physicians

Aside from the interdisciplinary teams of inpatient GEM units and consultation services, geriatrics is also practiced in hospitals by individual physicians with special expertise in comprehensive care. A recent study (Pawlson, 1988) compared the average length of hospital stay (LOS) of patients treated by geriatricians to the LOS of similar patients treated by general internists at one hospital. The difference in LOS was nearly twofold: 8.8 days for the geriatrician, 15.8 days for the internists. The greatest differences in LOS were observed among patients who were discharged to nursing homes. The geriatrician apparently were more willing and able to begin using the lower intensity resources of nursing homes earlier in the course of their patients' illnesses. The rates of death in the hospital and the rates of re-admission to the hospital within 60 days of discharge were slightly higher among the patients treated by the internists.

Geriatrics in Nursing Homes

The outcomes of different styles of medical practice in nursing homes have seldom been assessed. Two recent studies, however, have examined the results of practicing comprehensive geriatrics in this setting.

In the first (Rubenstein, 1990), a thorough examination followed by treatment recommendations was provided to a randomly

selected half of 160 ambulatory nursing home residents who fell. Compared to the control group, which received "usual care," the intervention group experienced a significantly lower rate of hospital admissions (46% versus 62%) and significantly fewer hospital days (six versus 12) during the following two years. The rate of falling continued to be almost the same in the two groups. Apparently, falling is a marker for unrecognized but potentially serious and modifiable underlying conditions. The conditions discovered most frequently in this study were infections, medication effects, postural hypotension, muscle weakness, and disorders of gait and balance. The authors projected that application of this 60-minute intervention nationwide could reduce the use of acute care hospitals by about a million patient-days per year.

The other relevant study of the effectiveness of geriatrics in nursing homes compared the outcomes of care provided by nurse practitioners (NPs) and physician assistants (PAs) with that provided by physicians (Kane, 1991). Comparisons of quality of care suggested that the medical groups using GNPS and PAs provided as good or better care than did the physicians in the control group. There were no differences in functional status changes or in the use of medications. The demonstration patients received more attention, as reflected in more orders written and an average of one additional visit per month. A cost analysis suggested that the use of GNPS and PAs saved at least as much as it cost and may save additional money with more sustained use.

Geriatric Home Care

The application of geriatric principles (comprehensiveness, coordination) to the care of homebound frail elderly people in the U.S. has been limited by present policies for the reimbursement of the costs of such care. Physician visits to patients' homes and nurses' efforts at case management are reimbursed minimally, if at all. Under the British National Health Service, however, an evaluation of the effectiveness of geriatric home care was recently reported (Challis, 1991). In this study, institutionalized patients in one district were sent home with extensive in-home services. Similar institutionalized patients in an adjacent district received "usual care." The elderly people who received community-based care had a higher quality of life, and there was no evidence of greater stress on their caregivers. The community-based service, although it involved extra costs to the social services department, incurred lower costs for the health service and for society as a whole.

Geriatrics in Day Hospitals

The model of care that perhaps best embodies the principles of geriatrics is the day hospital. Here the clients reside in their private homes, but spend several hours per day at the day hospital, participating in activities, having their conditions monitored, and receiving treatments from an interdisciplinary geriatric team. After the popularity and apparent success of the On Lok program in San Francisco became widely known a first wave of On Lok replication projects was initiated at eight sites

across the U.S. The cost effectiveness of this model is still unknown, however, an evaluation phase is beginning now. Even in Britain, where more than 300 day hospitals have been established during the past 20 years, there is no study in the existing literature that indicates whether day hospitals provide a reasonable return on the required substantial investment. A proposal for a cost-effectiveness study was published in 1986 (Donaldson, 1986).

Prospects for Chronic Care Benefits and Case Management

Issues from First Generation Experience

The chronic care benefits are the "social" part of the Social HMO. Without them, the S/HMO is no different from any TEFRA HMO, though with 100% of the AAPCC and the nursing home cell rate for all nursing home certifiable enrollees, the 1st generation S\HMOs enjoyed a more favorable reimbursement package than does the typical does the typical TEFRA HMO. Each S/HMO had its own chronic benefit package, which varied in terms of services covered, maximum amounts allowable, and amounts and type of consumer copays. The typical benefit caps resulted in chronic care benefits that were rather modest, and benefits were ratcheted down during the first five years of the demonstration. For marketing, the S/HMOs found it more important to compete with other health care providers by providing supplemental medical benefits rather than by adding to the chronic care benefits (for which was not in high demand and which also encouraged adverse selection).

As we have already reported, the cost of the chronic care benefits and the related case management accounted for only a modest proportion of the S\HMO expenditures. Moreover, ,despite the fact that the costs of case management were closely watched, one could argue that case management was as much a revenue center as a cost center, given that case managers performed the assessment of nursing home certifiability.

The benefit structure, including allowable caps and copays, set parameters for the chronic care benefits, but second-order decisions were also important for shaping the benefits and determining their potential value to the enrollees. Each S/HMO made decisions about the extent to which it would provide home care and other services from within its S/HMO organization as opposed to contracting from outside, and each developed contractual arrangements with specific providers. These operational decisions controlled the unit price of the components of the chronic care benefit package and, thus, influence the volume and type of services that a S/HMO member might be able to receive while remaining within the maximum caps. It is our understanding that during the 1st generation, these decisions were entirely internal to the S/HMOs rather than mandated by program design.

Finally, the stance of the case managers in informing clients about chronic care benefits and fostering choices is also important. For example, although the benefit caps were initially conceived on an annual basis, the case management unit developed

methods to work with clients and families to anticipate the annual costs and spread the plan's portion of the benefit on a monthly basis. This created de facto monthly caps, which were later formalized by many of the programs.

In summary, the nature of the chronic care benefit should be considered on several dimensions:

- the monetary value of the total benefit (i.e. caps);
- whether the chronic care benefit caps are construed on an annual or a monthly basis;
- the balance between allowable nursing home benefits and allowable home care benefits;
- degree of enrollee flexibility to use the chronic care benefits for the type of chronic care of their choice (e.g. nursing home versus home care versus day care);
- degree of enrollee flexibility to select particular providers of their choice, including from independent workers not employed by an agency.

HCFA did not impose either minimum or maximum requirements for the chronic care benefits in the 1st generation S/HMO demonstration. On the other hand, the case management component became quite standardized across the 4 demonstrations. The question now is, what stance should HCFA take regarding the chronic care benefits and the case management surrounding them? On the one hand, it could be argued that the S/HMO sponsored themselves should be motivated to develop chronic care packages that are desired by the consumers and bring good value for the

money. But just as the S/HMOs did not fulfill their potential to integrate acute-care and long-term care, they also were not particularly imaginative or flexible in the kinds of chronic care benefits that were developed.

Suggestions for the Chronic Care Benefit and Case Management

Several possibilities can be identified for improving the chronic care benefit and its associated case management in the 2nd generation S/HMO. First, and simplest, we argue that the benefit should be construed as an annual benefit rather than a monthly benefit. Second, S/HMOs could be encouraged to allow the benefit to be used for a flexible range of in-home services, including nonprofessional and non-agency services. Related to this, the S/HMOs should avoid the conflict of interest inherent in relying heavily on their own home care agencies for services under the chronic care benefit. Third, S/HMOs could be encouraged to use the chronic care benefit for the service component of assisted living and other residential care (something that would require rather complex arrangements to be made). Fourth, we recommend changes in the case management programs to bring them closer to medical care and post-acute care delivery, and to permit better accountability for the costs of plans (both under chronic care benefits and under regular Medicare post-acute care benefits). Each of these elements is briefly discussed.

Annual versus monthly caps. Monthly caps for expenditures on in-home services may make sense from a member's viewpoint if it is anticipated that need for chronic care benefits will fall

evenly through the year. However, one can anticipate many scenarios where the needs might be clustered during part of the year. For example, the client could develop a problem that requires intensive but time-limited services. Or, the client's family members might be more able to provide substantial assistance during some periods of the year and not during others. Undoubtedly, monthly caps help control the overall benefit, but they limit the flexibility and worth of the benefit to the member. If the annual cap is $12,000 and the monthly cap is $1,000, a client who needs $3000 worth of services in January and February could not be accommodated, even if her total annual expenditures were less than someone using the full $1,000 per month. The monthly cap could also result in members using services they don't really need, because they cannot accrue the benefit against a greater disability later in the year.

Flexible range of in-home services. Three S/HMOs used their own organizations to provide much of the in-home service. In particular, the Portland program used the Kaiser home health service extensively, the Minneapolis program used the home care and day care services of the Ebenezer Society (an at-risk partner in Seniors Plus), and Elderplan extensively used the home care agency of the sponsor. Although Ebenezer did discount its home health care to the S/HMO substantially, nonetheless it is by no means certain that members received the best-priced home care available in the market area and S/HMOs had incentives to

maximize the use of their home care program that might not always accord with the interests and preferences of the member.

Home care through Scan Health Plan and additional home care through the other S/HMOs was provided through agencies contracting with the S/HMO. It was typical, however, for S/HMOs to contract with only 1 or 2 additional home care providers. This further reduces the flexibility of the home care benefit for the enrollee. Further, although the S/HMOs had flexibility to negotiate care arrangements under the chronic care benefit, they did not use that benefit for purchase of non-agency service from individually employed home care workers identified by the client or the case manager, or for unconventional services (e.g. paying a neighbor for cooking a meal). It also did not appear that the S/HMO benefit was used to pay for home renovation or home equipment. Clearly, the S/HMO should to guard against providing a payment source for social agencies to perform services that would otherwise be free to the client (e.g. some friendly visiting, meal delivery, or yard work), and clearly the S/HMO is also concerned about the quality of the services provided. But it may often be possible for a client to receive more hours of services through arrangements with individual vendors or more desirable services through a wider array of agencies than if limited for a few. Arrangements where services are priced lower because the home helper boards with the S/HMO member are also feasible. If the chronic care benefit can be used for services purchased from

a broad array of agencies and individuals, the members may end up receiving greater value for their benefit.

Even the possibility of paying relatives of the client for giving care should be considered. Various states have developed experience with this practice and have developed approaches to avoid the moral hazard. There is now another precedent for this, because some sites in the HCFA-funded Medicare Alzheimer's Demonstration reimburse family members for care. As with independently employed workers, family members may be able to provide more services for less money and enable the enrollee to receive more care within the cap.

Flexibility and individualized arrangements take on particular importance for in-home services because of their intimate nature, the strong preferences clients ahve for particular arrangements, and the likely variation in ideal ways to mix and match those services for clients to take advantage , Assisted living services. Increasingly, it is recognized that some people, particularly those lacking family support, are too disabled to live in their own household and receive services cost-effectively. Such people would be unlikely to have their needs met within the caps established for home care and day care under the chronic care benefit. On the other hand, the member may prefer not to enter a nursing home and might well be able to live in a board-and-care situation where personal care services were also available. In Oregon, one of the states with an S/HMO, both adult foster care and assisted living services are available in

the private sector and with Medicaid waiver funding; the former is about 2/3 and the latter about 4/5 the cost of nursing homes. S/HMO members sometimes lived in adult foster care homes, but adult foster care per se was not considered part of the S/HMO benefit. The S\HMO) could potentially have developed a system where it would have paid for a portion of the foster home rate, equivalent to the service provided there rather than the rent. The State Medicaid program has already developed such a system for covering the care of low income persons in both foster care and assisted living wherein the client's SSI finances a portion of the cost in recognition of the housing function and the Medicaid program reimburses for the balance. It would be feasible for the S/HMO to develop such an arrangement as well. Although Oregon is the most advanced among the 1st generation S/HMO states in the development of alternative housing for nursing home certifiable people with need for services, Minnesota, California, and New York all had some similar developments. For example, in the Minneapolis area there is an innovative apartment complex that has established its own in-house home-care agency that provides billable services to the residents.

This issue is important because the paradigm for residential long-term care services is gradually changing. By the time the 2nd generation S/HMOs are well-launched, there may be opportunities in their states for a person to receive intensive, intermittent services in residential settings that permit much more privacy, individualization, and normal lifestyles than do

nursing homes. It would be important that the S/HMOs be able to purchase such services for their clients and that their clients not be disadvantaged in their ability to use such innovative programs. Indeed, it would seem appropriate for the S/HMOs to be in the vanguard of working out ways that insurance mechanisms can help support new models of residential care.

If the S/HMOs start covering the service component in assisted living programs, it will also be necessary to rethink the distinction between the nursing home portion and the community care portions of the chronic care benefits. It may be that the distinction should disappear, or it may be that payments to support assisted living settings could count toward either the home care or nursing home caps. Some assisted living programs are designed to serve people as they become more and more disabled and, thus, to obviate the need for nursing home care; for these persons, the nursing home benefit would likely be superfluous--i.e. a benefit that they would never take up.

Case management linked to acute care. The case management programs in the 1st generation S/HMOs suffered from their separation from acute care. In particular, they did not usually have the capacity to plan a post-hospital step-down interventions or to plan alternatives to hospitalization for someone whose problem presented at a medical clinic. In keeping with this model, the case managers were accountable only for efficient and effective use of the relatively small extended care benefit, not efficient and effective use of the Medicare-covered services. In

particular, the Kaiser program was designed to test the effectiveness of a case-managed chronic care benefit following expiration of Medicare benefits. In the early days of Seniors Plus and Elderplan, some concerted efforts were made to use all resources (both Medicare-covered and chronic-care-benefit-covered) effectively, through strategies such as judicious use of geriatric nurse practitioners, and case-finding and early intervention in hospitals, medical clinics, and nursing homes, but generally case management was perceived as separate from acute care.

In the second generation, S/HMO it might be possible to consciously break down these barriers. If the 2nd generation is also construed as a chance to demonstrate good geriatric care, there may be more receptivity on the part of physicians to early planning and involvement of case managers in coordinating an entire care plan. Case managers could still be nurses and social workers with training similar to those now doing case management in the S/HMOs. The preconditions for effective integration with acute care probably include: geographic proximity to the physicians; some trigger system that makes it completely apparent to the physician that the patient is a S/HMO member; some information system that notifies case managers in a timely way that an S/HMO member is in the hospital or having difficulties; and different ground rules clearly communicated to case managers, physicians, and S/HMO members about each other's roles. If case management techniques and recommendations are

applied to Medicare services, however, there will be need for care to count only services that would not be covered by Medicare in drawing down the chronic care benefit.

CHAPTER VI: CONCLUSIONS AND RECOMMENDATIONS

Two conclusions follow from the analyses presented in the previous chapters. First, the demand for LTC insurance has been overestimated. The type of LTC insurance offered by the S/HMOs seems especially unattractive because it provides only modest front-end coverage, but there is no reason to suppose the large numbers of older persons would be willing to pay substantially more for more complete coverage. The second is that S/HMOs, at least as implemented in the first generation, did not develop a delivery system that controlled the costs of either acute or long-term care better than what was being done elsewhere. If S/HMOs are to survive economically under the present system of payment for long-term care, they need not only to act like TEFRA HMOs but, in addition, to place some controls on the use of the chronic care benefit.

To be successful a S/HMO must control acute care utilization, control the effect of moral hazard with respect to all care, but especially chronic care services, and avoid biased selection, either through screening or through product pricing.

The second generation S/HMOs must address these questions. Three alternatives available for the second generation are:

1) Addressing the pricing and content of the chronic care benefit,

2) Controlling biased selection through screening or product pricing, and

3) Changing the organization of care delivery.

Pricing and Content of the Chronic Care Benefit

Given the seemingly inherent low demand for LTC insurance it would be prudent to either decrease the cost of the benefit through premium reductions or through enriched benefits. This is especially important given the poor performance, in terms of both number of enrollees and cost of recruitment, demonstrated by the first generation S/HMOs and HCFA's reluctance to provide non-care related monies for the second generation demonstration.

The approach is straight forward, premiums should be set at actuarial fair rates; these rates should then be offset by savings from changes in the organization of care and the extra 5% of the AAPCC for the non-NHE members.

Clearly there is latitude enough within the present system to decrease the premium significantly. Two of the S/HMOs even appeared to run profits in excess of their premium levels (Elderplan and SCAN). Another way for the plans to pay for enriched benefits (or to offset premiums) is to increase the size of their membership, savings both from economies of scale and to limit the number of moderately or severely impaired members. Lastly, consideration should also be given to purchasing a LTC insurance on the private market to cover additional coverage, i.e. after the $6000-12000 current benefit has been spent. While we can not estimate the cost of this additional insurance it would no doubt be less expensive than the first dollar coverage offered by the current S/HMOs.

As discussed in the previous chapter, we recommend that the chronic care benefits be construed with annual rather than monthly caps for community services. Apart from that, we recommend that HCFA continue a permissive approach to the definition of the chronic care benefits, and that no restrictive list be developed. Within that context, we recommend that S\HMOs be encouraged to use services from a wide array of agencies; that they incorporate payment for services from individual vendors such as self-employed home workers and, on occasion, neighbors; and that the S\HMOs be encouraged to pay for the service component of residential and assisted living settings from the chronic care benefit. To do the latter, it might be necessary to allow members to count expenses for assisted living as drawing down on either the cap for nursing home care or for community services (if differential caps are maintained).

Controlling Biased Selection

Biased selection results from calculating costs, which were developed on one group, and applying them to a different group. Thus, we base the AAPCC on the cost of FFS medicine, but we use it to pay for members of HMOs. The bias here is positive. HMO members are typically healthier than non-HMO members and thus require less expenditures for health care than those remaining in FFS. Potential S/HMOs are correctly skeptical of self enrolling populations. In the case of S/HMOs biased selection is expected. Those needing the LTC services or those who see themselves as needing them in the future are probably more likely to enroll.

In the first generation selection was controlled by explicit screening of potential enrollees and limiting the number of moderately and severely impaired members to a fixed percentage of total membership. Another way to control biased selection is by pricing the LTC premium so that it better reflects the actuarial risk of each individual. Thus rates, usually established at enrollment, for those at higher risk would be higher. In the private market for LTC insurance rates for a class of individuals (usually based on age) are typically held at a fixed dollar premium. When prices are increased they are increased for the entire group of beneficiaries. Using the average premium from the HIAA survey for an example, a person who bought a premium at age 50 would pay $483 dollars per year. That rate would not increase for a given individual unless the rate for all 50 year olds, who enrolled at the same time, increased. At the same time a 65 year old would face annual payments of $1,135. Again, these would be fixed payments until the lapse of the policy through lifetime maximums, failure to renew or the death of the beneficiary.

Even with explicit screening (assuming no change in the organization of care), failure to adjust the premium rates for individual risk at the time of enrollment will lead to financial calamity. While the first generation S/HMOs appear to have made money their policy of a flat premium will eventually lead to net losses as their membership ages in place. Adoption of a constant price risk based premium, most likely based upon age and functional status, would alleviate this fatal attribute of the

first generation S/HMOs. It also obviates the need for queuing, which was imposed by the use of a flat rate premium.

As we have argued, the fear of biased selection is one of the largest impediments to recruiting new S/HMO providers, especially among HMOs. One way around biased selection is the enrollment of an intact population into the S/HMO. We suggest that two populations be given consideration: TEFRA HMOs and MIGS.

In the first case the procedure would be simply to enroll an entire TEFRA HMO population into the S/HMO paying 100% of the AAPCC for all the members. This as the advantage of providing the new S/HMO with a population with which it is very familiar and for which it would not need to add extended benefits in addition to those already offered. Additionally, the cost of recruiting members will be quit low. This is especially important since HCFA has decided not to pay for any start up cost, or to provide stop loss as in the first generation demonstration, above the 100% AAPCC payment and offering the institutional rate for members deemed NHE. Another advantage is that for a large plan the extra 5% of the AAPCC could be used to offset the high cost of the chronic care benefit or to increase the coverage of LTC package. Lastly, a major advantage of this approach is that it would provide a large enough membership to warrant changes in the organization of care delivery within the S/HMO. Unfortunately, in the first generation of Social HMOs, we argue that the number of patients needing LTC services was so low as to make it imprudent for the S/HMO to formulate, much less implement, changes to the

basic delivery system. Recall that even in the largest of the S/HMOs had only a little over 600 (11% of all members) NHE members and the other S/HMOs all had under 300 NHE members.

The disadvantages of this approach include the fact that it does not guarantee that anyone will purchase the LTC option. Neither does it prevent biased selection if changes to the current 'flat rate' premium are not made. Indeed, biased selection might be severe unless actuarial fair rates are put in place. However, these rates may themselves decrease demand for the benefit. On the other hand, as mentioned above, the additional 5% of the AAPCC available to the S/HMO from a much larger base could be used to keep the cost of the chronic care benefit low.

Organization of Care Delivery

The second round of S/HMOs provide an opportunity to test the potential for providing care for Medicare patients in ways that can both improve health and control costs. There is a need for experimentation to establish just what kinds and combinations of geriatric and case management services will produce the desired savings through minimized iatrogenic problems and early attention to functional needs. Few models of demonstrated efficacy are currently available and hence it will be difficult to convince HMOs to make the investment in geriatrics without better data on the value of such an emphasis.

One of the issues needing further exploration is the appropriate targeting of geriatric services. As was the case with

nursing home diversion efforts, there is a danger of both over- and under-use. More experience needs to be acquired that links geriatric care longitudinally with the outcomes resulting to model the best strategies for allocating such care. Similarly, geriatric care needs to be better interdigitated with case management. There is some potential duplication of roles, since geriatrics involves care coordination and the ability to mobilize and direct the services from multiple disciplines. In some instances particularly during acute-care episodes, the geriatrician may de facto case manager; in others s/he may play a more supporting role that supports the general case manager.

It is unlikely that even a few models will provide the basis for a definitive set of guidelines about when and how geriatric care should be used, but it should provide some parameters by which to assess the potential for such use and experience on which to base estimates of expected benefits. Such expectations will be helpful to both HMOs and to the payors (i.e., the government).

One should not anticipate that programs like the S/HMOs will be run from a manual that specifies what is done to whom, but some means of assuring that at least minimally adequate care is provided will be needed, especially because the incentives in any capitated system point toward giving less care. The pilot projects should provide the basis for determining what the minimum standards of adequate care should be.

Case management should be structured so that it can be closely integrated with acute-care delivery. Case managers should be involved in care planning, when appropriate, even if the client is still receiving Medicare-covered acute-care or long-term care services. Moreover, the case management effort should be directed at making the best use of Medicare as well as non-Medicare services, though obviously only the latter should be considered as drawing down on the chronic care benefits.

Evaluability

It would be useful to consider in advance how to enhance the ability to evaluate the 2nd generation S/HMO demosntration and to avoid some of the difficulties that were encountered in the original demonstration. These include difficulty in making corss-S/HMO comparisons; difficulty in comparing S/HMOs to TEFRA HMOs operated by the same sponsor; and difficulties in getting enrollee level information about utilization, outcomes, and costs.

Because the S/HMOs will be at immediate financial risk, they will be unlikely to want to invest in an information system for evaluation. An information system should be developed at each S/HMO that allows creation of uniform data sets, including client descriptors and profiles of services used and costs incurred by each enrollee. These data are ultimately needed for evaluation and are also necessary for prational management of benefits. HCFA should require such a system and should consider paying for it.

Each S/HMO is likely to be rather different, and to demonstrate different variations on the theme of geriatric care and case management. More will be learned if each program has sufficient numbers of severely impaired enrollees to permit within-site as well as across site analyses. Furthermore, a substnail number of impaired enrollees are needed to mount tailored geriatric interventions. HCFA should consider setting targets for enrollments of impaired persons that are much larger those of the 1st generation S/HMOs and selecting programs likely to be able to achieve those numbers.

Recommendations for a S/HMO RFP

1. The RFP should solicit sponsors that are already TEFRA HMOs or MIGs. HCFA may also want to consider soliciting proposals from medical clinics that serve large defined populations.
2. The RFP should require evidence of the sponsoring organizations's commitment to a geriatric style of practice. Because there is no single, even best, approach to this, we propose that the RFP make clear that the applicant indicate how it will involve an organized geriatric effort as a central part of its S/HMO activities.There are two reasons why the 2nd generation S/HMO RFP should indicate a general insistence on a practice model that demonstrates a strong commitment to geriatrics without dictating precisely how that commitment should be carried out:

    1] The state of the art is not sufficiently well established to state with certainty that

particular elements of practice are critical components of such an approach.

2] There is a danger that an applicant organization might adopt the appearance of a geriatrics approach without truly making the necessary commitment to using a special form of care.

By leaving the task of designing the specific approach to the applicant, HCFA reserves the opportunity to see how innovative and deep the applicant's approach will be.

There are several elements that can be considered important parts of a geriatric approach. A central role for a geriatrician is essential. This should extend beyond simply having geriatric services available. The geriatrician should play a key role in designing and overseeing the S/HMO program. There should be a designated geriatrics service, staffed with geriatrically trained personnel in at least medicine , nursing and social work. The use of geriatric nurse practitioners is strongly encouraged, especially as providers of primary care to frail older persons. Provisions should be made for a geriatric evaluation and management program, preferably targeted to frail older persons. Specific protocols for determining what sorts of patients will be referred to the geriatrics

service on what occasions demonstrate a planned intent to use geriatric services carefully. Closer examination of the specific protocols can provide more insight into the extent to which geriatrics will be used.

Other indications of geriatric emphasis include the following:

- drug review, especially for high risk patients (e.g., defined as those receiving more than 5 prescriptions)
- case management for persons with disabilities
- protocols for evaluating and managing common geriatric problems (e.g., falls, incontinence, insomnia, confusion)

3. The S/HMO applicants should document their plans and demonstrate their abilities to develop and implement creative plans to meet the long-term care needs of its clients. In addition to demonstrating the availability of traditional purveyors of LTC services such as home care, day care and nursing home care, the S/HMO should indicate how it will maximize the chances of care planners developing innovative responses to patient needs rather than simply responding from a fixed menu.
4. The S/HMO applicant needs to define clearly how its case management program will operate. What will be the function and responsibilities of case managers? What

will be their authority? How will they interface with other decision-makers such as physicians and discharge planners? How will they interface with the geriatrics program? Once again, because there is no single best way to provide these services, the applicant should be instructed to demonstrate that they have a well conceived plan. This plan can also be part of the basis for subsequent evaluation.

5. The S/HMO applicant should describe the range of ways that the chronic care benefit can be used and encouraged to show that client choice and flexibility of service will be maximized. S\HMO applicants can be asked to demonstrate how the structure of their benefit allows the client to get as much possible home-based service within the benefit caps as is feasible in the market area. They should be asked specifically to describe how, if at all, the planned benefit can be used to purchase non-agency services and the conditions under which such a use would be made (e.g. only when no agency is available, when it is chosen by the client, when it is cheaper), as well as how the quality of such service would be monitored.

6. The RFP should specify that it is HCFA's intent that the S\HMO not control benefit use by capitalizing on the enrollee's likely reluctance to enter a nursing home while failing to allow exercise of the benefit for the service component in other housing. The applicant should describe

its approach to providing some coverage for care in residential settings other than nursing homes, should the enrollee elect that care. Since states vary in their regulations for assisted living and board and care with enriched services and since these practices are also evolving, the applicant should demonstrate a knowledge of what is available in the market area and show how the S\HMO chronic care benefits would permit coverage for such services.

7. The RFP should establish expectations for S/HMOs to develop the information system necessary for evaluation, as well as to maintain an information system that allows case managers to track utilization and costs of actual services received in a timely way.

REFERENCES

Allen, CM, Becker, PM, McVey, LJ and et al. A Randomized Controlled Clinical Trial of a Geriatric Consultation Team: Compliance with Recommendations. JAMA 1986;255:2617-2621.

American Medical Association. American Medical Association's Council on Scientific Affairs: White Paper on Elderly Health. Archives of Internal Medicine 1990;150:2459-2472.

American Medical Association Council on Scientific Affairs. American Medical Association White Paper on Elderly Health, Archives of Internal Medicine. 1990;150:2459-72.

Applegate, W, Deyo, R, Krame, A, and Meehan, S. Geriatric evaluation and management: Current status and future research directions. Journal of the American Geriatrics Society 1991;39S:2S-7S.

Birnbaum, HG, Causino, N, Delaney, CA, Lang, KM. The Feasibility of a Medicare Insured Group for Deere & Company Beneficiaries. Prepared for: HCFA. Mikalix & Company, Waltham, MA, August, 1991.

Birnbaum, H, Holland, S, Lenhart, G, Reilly, H, Hoffman, K, Pardo, D. Savings Estimate for a Medicare Insured Group (MIG). Health Care Financing Review 1991.

Brody, EM, Kleban, MH and Moles, E. What Older People Do About their Day-to-day Mental and Physical Health Symptoms. J Am Geriatr Soc 1983;31:489-498.

Challis, D, Darton, R, Johnson, L, Stone, M, and Traske, M. An evaluation of an alternative to long-stay hospital care for

frail elderly patients: II Costs and effectiveness. Age Ageing 1991;20:245-254.

Donaldson, C, Wright, K, and Maynard, A. Determining value for money in day hospital care for the elderly. Age Ageing 1986;15:1-7.

Fox, PD, Heinen, L, Kramer, AM, Morgenstern, NE, and Palsbo, SJ. Initiatives in Service Delivery for the Elderly in HMOs. Prepared for: The Robert Wood Johnson Foundation. Lewin/ICF, Washington, D.C. February, 1991.

Fuessner, JR, Wieland, D, Kayser-Jones, J, Kramer, A, Saunders, S and Fretwell, M. Working group recommendation: methods for geriatric evaluation and management research. Journal of the American Geriatrics Society 1991;39S:45S-47S.

Gillick, MR. The impact of Health Maintenance Organizations on geriatric care. Annals of Internal Medicine 1987;106.

Harrington, C, Lynch, M. Physical Services Offered by the Social Health Maintenance Organizations. Report Prepared for: The Health Care Financing Administration. October, 1991.

Harrington, C, Newcomer, RJ. Social Health Maintenance Organizations' Service Use and Costs, 1985-1989. Paper presented at the American Public Health Association Annual Meeting, September, 1990.

Health Insurance Association of America. Research Bulletin: Long-Term Care Financing Proposals: Their Costs, Benefits and Impact on Private Insurance. Washington, D.C. January, 1991.

Hedrick, SC, Barrand, N, Deyo, R, Haber, P, James, K, Metter, J, Mor, V, Scanlon, M, Weissert, W, and Williams, M. Working group recommendations: Measuring outcomes of care in geriatric evaluation and management units. Journal of the American Geriatrics Society 1991;39S:48S-52S.

Jahnigen, DW, Applegate, WB, Cohen, HJ, Epstein, A, Granger, C, Hogan, D, Kennedy, R, and Lazaroff, A. Working group recommendations: Research on content and efficacy of the geriatric evaluation and management interventions. Journal of the American Geriatrics Society 1991;39S:42S-44S.

Kane, RL, Garrard, J, Buchanan, JL, Rosenfeld, A, Skay C, and McDermott, S. Improving Primary Care in Nursing Homes. JAGS 1991;39:359-367.

Karon, SL, Capitman, JA, Leutz, W. Long-Term Case User Characteristics and Initial Patterns of Care in the Social/HMO.

Kolb, DS, Veysey, PJ, Gocke, JL. Private Long-Term Care Insurance: Will it Work? Topics in Health Care Financing 1991;17(4):9-21.

Kramer, A, Deyo, R, Applegate, W, and Meehan, S. Research strategies for geriatric evaluation and management: conference summary and recommendations. Journal of the American Geriatrics Society 1991;39S:53S-57S.

Langwell, KM, Hadley, JP. Evaluation of the Medicare Competition Demonstrations. Health Care Financing Review Winter, 1989;11(2):65-80.

Lawton, MP, Moss, M, Kleban, MH, Glicksman, A, and Rovinem, M. A two-factor model of caregiving appraisal and psychological well-being. Journal of Gerontology 1991;46:181-189.

Medicare Prepaid Health Plans, Monthly Report. October, 1989.

Montgomery, RJV, Gonyea, J, and Hooyman, N. Caregiving and the experience of subjective and objective burden. Family Relations 1985;34:19.

National Institute of Mental Health. NIH Consensus Development Statement: Geriatric assessment methods for clinical decision-making. Journal of the American Geriatrics Society 1988;36:342-347.

Newcomer, RJ, Harrington, C, Friedlob, A. Social Health Maintenance organizations: Assessing their initial experience. Health Services Research 1990;25(3):425-454.

Palsbo, SJ. The USPCC Explained. Group Health Association of America, Inc., Washington, D.C. Research Brief 5, June, 1988.

Palsbo, SJ. The AAPCC Explained. Group Health Association of America, Inc., Washington, D.C. Research Brief 8, February, 1989.

Palsbo, SJ. The Demographic Factors Explained. Group Health Association of America, Inc., Washington, D.C. Research Brief 10, February, 1990.

Pauly, M. More on Moral Hazard. Journal of Health Economics 1983;2:81-85.

Pawlson, LG. Hospital Length of Stay of Frail Elderly Patients: Primary Care by General Internists versus Geriatricians. J Am Geriatr Soc 1988;36:202-208.

Pruchno, RA and Potashnik, SJ. Caregiving spouses: Physical and mental health in perspective. Journal of the American Geriatrics Society 1989;371:697-705.

Radloff, LL. The CES-D scale: A self-report depression sale for research in the general population. Applied Psychological Measurement 1977;1:385-401.

Rice, T, Thomas, K, Weissert, W. The Effect of Owning Private Long-Term Care Insurance Policies on Out-of-Pocket Costs. Health Services Research February 1991;25(6):907-933.

Rubenstein, LZ, Robbins, A, Josephson, KR, Schulman, BL and Osterweil, D. The value of assessing falls in an elderly population. Annals of Internal Medicine 1990;113:308-316.

Rubenstein, LZ, Stuck, AE, Siu, AL and Wieland, D. Impacts of geriatric evaluation and management programs on defined outcomes: Overview of the evidence. Journal of the American Geriatrics Society 1991;39S:8S-16S.

Rubin, RM, Wiener, JM, Meiners, MR. Private Long-Term Care Insurance: Simulations of a Potential Market. Medical Care 1989;27(2):182-193.

Scharlach, AE and Boyd, S. Caregiving and employment: Results of an employee survey. Gerontologist 1989;29:382-387.

Winograd, CH. Targeting strategies: An overview of criteria and outcomes. Journal of the American Geriatrics Society 1991;39S:25S-35S.